



# “Violence Is a Many-Splintered Thing”

## The Importance of Realism, Justification, and Graphicness in Understanding Perceptions of and Preferences for Violent Films and Video Games

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**Abstract:** Historically, debates over media violence have been a central focus of media research. Yet lacking from these debates is a meaningful discussion about the conceptualization of media violence. We argue that violence is not a monolithic construct, and is based on viewer perceptions of specific types of images and framing in media content. This idea has scholarly precedence: In 2002 and 2003, Potter and his colleagues proposed that perceptions of violence are formed as audience members make assessments about the relative levels of (in order) graphicness, realism, and justification for witnessed, on-screen violent actions. This article furthers this tri-partite conceptualization by using a binary-choice conjoint analysis to determine the role of each attribute in guiding audience perceptions of and preference for violent media in film and video games. For both media types, justification was the most central factor in shaping perceptions of violence, but realism was the most important predictor for the preference of violence.

**Keywords:** film, media entertainment, video games, violence perceptions, violent content

Popular entertainment media is filled with violence. Blood-spattered horror films consistently draw massive crowds, and action-packed violent video games are regularly among the best sellers. Evidence points to the popularity of violent entertainment and suggests simply that audiences must enjoy such portrayals. Put bluntly, popular media audiences both decry and demand violent media, and producers deliver on these demands. However, violence is not inherently enjoyable. Audiences cringe when witnessing the brutal open-



ing scenes from *Saving Private Ryan* [1998] (a remarkably authentic rendition of the Allied invasion on the beaches of Normandy), the cruel and unusual acts in films such as *Saw* [2004] (which features grisly torture violence as a central plot device), or the bloody fantasy violence of the cult classic movie *Riki-Oh* [1991] (in which the titular character wantonly guts and bloodies his adversaries).

Disgust and fright reactions are commonplace when watching audience members' responses to the on-screen action, but these sort of movies are financial and critical successes—a paradox in that audiences both celebrate and revile on-screen violence.

Conversely, if we consider that violence is made up of different aspects that make it more or less appealing to a viewer based on their perceptions of these aspects, this paradox becomes much more understandable. Indeed, as and colleagues have (2002, 2003), it is not accurate to classify a particular portrayal as being simply violent or not, but rather whether or not a particular film is perceived as violent based on specific characteristics of that portrayal. Potter et al. found that specific framing of violent content along three main dimensions (realism, graphicness, and justification) shaped viewers' perceptions of violence. Even in the above examples, we see violence that is more or less graphic (*Saving Private Ryan*), more or less justified (*Saw*), and more or less realistic (*Riki-Oh*).

There might be some macrolevel societal agreement as to what makes a portrayal more or less graphic, justified or realistic (on the role of cultural morality in media portrayals, see Joeckel et al. 2012; Tamborini 2011). Yet we must recognize that the meaning derived from any media portrayal is in the eye of the individual consumer charged with interpreting and making sense of the actions witnessed on-screen. Research by Potter and Tomasello (2003), for example, reports that audience judgments of the amount of violence in different movies are at least four times more accurately predicted by studying perceptions of the content than by the amount of violence coded for by objective content coding schemes. In other words, it is the subjective interpretation rather than an objective determination of content that seems to be more meaningful in determining perceptions of violence. Further complicating the issue is the nature of medium-specific content expectations—namely, the nature of violence across two very popular-yet-distinct entertainment forms: film and video games. Both media forms feature violent content, but the nature of this content is quite different. Unlike movies, in which audiences bear passive witness to violent actions, video games require audience members to actively engage in and perpetrate violent actions (Tamborini and Skalski 2006). Therefore, when studying perceptions

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### **The Popularity of Media Violence**

Despite the negative visceral reaction most people feel when confronted with graphic violence, some of the most acclaimed and popular films of all time feature just this type of content. Filmmaker Quentin Tarantino once said “Violence is one of the most fun things to watch” (Coyne, Nelson, and Underwood 2011) and he is not alone in that sentiment. The American Film Institute’s “100 Years, 100 Movies” ranking of the greatest movies of the twentieth century (voted on by 1,500 cinema experts) contains titles with extremely violent scenes, including the gangster violence of *The Godfather* [1972] (ranked #3) and the unflinching depiction of the Holocaust in *Schindler’s List* [1993] (ranked #9; American Film Institute 2011). Films featuring violent content have also done very well at the box office. Of the top grossing movies of all time in the United States, most are action-adventure epics featuring PG and PG-13 rated violence such as *Avatar* [2009] (ranked #1), *The Avengers* [2012] (ranked #3), and films in the *Star Wars* saga [1999; 1977] (ranked #5 and #6; Box Office Mojo 2011)

Although the nature of violence varies from film to film, some form of violent action is central to the narrative. For example, in *The Godfather* Michael Corleone’s brutal revenge assassinations of a police captain and a rival family associate for their attempted murder of his father serve as the turning point of the film, as well as one of its more memorable scenes. Indeed, after Michael shoots Captain McCluskey through the throat, the film cameras linger on the officer as he grasps for the wound and struggles to take his final breaths. In a similar fashion, less graphic and realistic movies such as the computer-animated violence in *Avatar* and *The Avengers* feature combat, both weapons-based and hand-to-hand, as a main focus of both films’ narratives.

Likewise, some of the most popular video games of all time are also among the most violent. According to VGCharz.com, violent video games such as Activision’s *Call of Duty: Modern Warfare 3* [2011] (selling nearly 27 million copies for the PlayStation 3 and X-Box 360 combined) and *Grand Theft Auto: San Andreas* [2004] (reporting nearly 20.1 million copies of the game sold on Sony’s PlayStation 2 alone) both rank among the top 15 all-time selling video games. Perhaps the most oft-cited example of gratuitous violence in a video game setting is the *Grand Theft Auto* video game series. The game contains enough acts of exaggerated criminal violence to lead some such as antiviolent video game advocate Jack Thompson to label the game as a murder simulator and question the ethics of its public availability, particularly to minors. Debates about the game’s influence on those who play continues, but there is no debate that the game franchise—which has shipped over 114 million titles over

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the last 16 years—is among the top-selling packaged media products of all time (Orland 2011). As with the film examples, these and other video games feature violent action as the core mechanism of gameplay.

Social scientific evidence also points to the prominence and popularity of violence across a variety of entertainment media. Perhaps the most well known is the National Television Violence Survey, in which Smith and colleagues (1998) conducted a large-scale, scientific content analysis of television and film violence and discovered that roughly 61 percent of programming contained violence. In a similar content analysis focused on video games, Smith et al. found that 68 percent of the 20 most popular games across three systems contained at least one act of violence and 78 percent of these were “lethal acts of aggression that would result in moderate or extreme harm in the real world” (2003: 68).<sup>1</sup> Additional evidence shows that there is an equally large demand for this violence, or there would little reason from an industry standpoint to produce it (Hoberman 1998). However, the problem with all these attempts to quantify media violence is that the definition of violence varies from study to study based on how the scholars chose to define the concept.

### What Is Violence?

For all of the debate as how violent entertainment media is and how much we enjoy it, there is little discussion as to what the notion of “media violence” actually is. Similar to Justice Potter Stewart’s infamous “I know when I see it” approach to defining pornographic material in *Jacobellis vs. Ohio*, there seem to be various accounts as to what makes something more or less violent. Groups like the Parents Television Council regularly decry media violence, while producers of such content defend it. The 1976 video game *Death Race*, which involved nothing more than having players drive a car over human-like figures for points, generated controversy (including parent protests and a *60 Minutes* segment) despite extremely primitive graphics that would likely be laughed at by audiences today (Gonzalez n.d.). Even social scientists have struggled with defining violence in content analyses. The definition of violence used in seminal cultivation effects research by Gerbner (1970)—“the overt expression or threat of physical force as part of the plot”—differs slightly from that of the more recent National Television Violence Study (Smith et al. 1998), which defines violence as “any overt depiction of a credible threat of physical force or the actual use of such force intended to physically harm an animate being or group of beings.” Still more studies debate for the level of harm or intentionality involved; for example, Eron (1987: 453) defines aggression as “an act that injures or irritates another person,”

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while Huesmann and Miller (1994: 155) define it as actions “intended to injure or irritate another.”

**Conceptualizing violence along different dimensions such as graphicness, realism, and justification may be most useful in understanding the concept.**

The differences in the definitions suggest that rather concerning ourselves with the notion of entertainment as violent or not, it may be much more important to examine how various content dimensions shape viewer *perceptions* of films and games. Potter and colleagues (2002, 2003) suggest that conceptualizing violence along different dimensions such as graphicness, realism, and justification may be most useful in understanding the concept.

The most important and perhaps easiest dimension to understand is the degree to which the violence is graphic. Potter and Mahood (2002) argue that graphicness is the attribute group most central to audience assessments of media content as violent. This attribute group is comprised of judgments related to the graphicness itself (which includes portrayals of blood, gore, and dismemberment), explicitness (which includes the level of focus, concentration, and detail shown on-screen), and seriousness (which excludes depictions of occurrences as absurd, exaggerated, or unrealistic) of the violence depicted (Potter et al. 2003). Graphic portrayals of violence are remarkably central in recent media products such as *Rambo* [2008] and *Game of Thrones* [2011] in which bullets and iron, respectively, are shown tearing and rending flesh and bone in fantastic and exaggerated displays of blood and gore. However, we also see similar violent media that is decidedly nongraphic, such as classic war movies like *Sergeant York* [1941] where soldiers are shot and then simply fall down without bloody consequence, or swordfights without intense gore and blood splatter like in *The Adventures of Robin Hood* [1938].

The second factor that may be important when understanding a violent media portrayal is the extent to which it is perceived as realistic. The National Television Violence Study (Wilson et al. 1997) defines realism as the actuality of characters, settings, and events, and it identifies four distinct types of realism: depictions of reality (e.g., newsreel footage), recreations of reality and real events (e.g., reenactments of crime scenes), fictional portrayals of events that could realistically happen in real life (e.g., an action scene in a Hollywood war movie), and fantasy portrayals of events that are not possible in the real world (e.g., a monster battle in a film or video game). Serious games developer and scholar Ian Bogost (2011) writes that film representations of violence are often abstracted for graphic effects, and, as a result, can hardly be understood as realistic. They present artistic interpretations of gun battles or fistfights. Quentin Tarantino’s *Kill Bill* [2003] is a particularly prominent and popular example of this sort of overly stylized live-action violence. Potter and colleagues (2003) emphasize that realism is also important in audience interpretations of violence.

To distinguish graphicness from realism, we might consider the sheer descriptive act of violence as graphicness, while we might consider the psychological plausibility of an act as realism. One example of this can be found in comparing graphic portrayals of fistfighting in the film and video game versions of Ultimate Fighting Championship (UFC) bouts. In both versions, great focus is placed on bloody abrasions, contusions, and lacerations on fighters resulting from in-match fighting. Yet, the video game versions of the same physical damage to a fighter might be perceived as less realistic because the inflicted damage is not on a real person but a virtual avatar; literally, it is not of the real world. In other words, injuries to a computer avatar have little psychological probability and are therefore less realistic than the same injuries inflicted on an actual human being (see Hartmann and Vorderer 2010).

Think of the popular fight scene from the *Matrix* [1999] in which Neo (the hero) learns kung fu and battles his trainer, Morpheus. A popular meme (viral Internet pun) was created after the movie featuring the exact same fight actions as in the movie but portrayed by stick figures.<sup>2</sup> Although the same behaviors took place to the same music and with the same types of characters, the most common comments on these videos were humorous. We would argue this is due to their less realistic portrayal of the same level of graphic violence.

In contrast to graphicness or realism, which deal with the portrayal of violence on screen, the justification of violence, or the extent to which it is excused or justified by the plot, is an additional concern for audiences when assessing the level of on-screen violence. The importance of justification can be seen in the debate over intentionality of an action in prior social scientific definitions of violence. Justifying violence can include concepts related to punitiveness, remorse, fairness, and justification for character actions (Potter et al. 2003). For example a defensive karate kick to a criminal's face by Walker, Texas Ranger, is likely to be viewed as less violent than a criminal attacking a Texas Ranger with the same kick, due to the perceptions of lawfulness surrounding both actions.

### **Violence as Medium-Specific?**

Perceptions of violence may also differ as a function of the medium used to communicate it. The expectations and standards as to what is violent or not may vary between video games and film, with similar productions receiving quite different ratings from the Entertainment Software Review Board (ESRB) and the Motion Picture Association of America. An example of these production differences can be seen by comparing the video game and film versions of *Mortal Kombat*. Released in 1992, the video game version of *Mortal Kombat*, a mythical fighting contest in which killing was the only way to win, is largely considered to be the first title to combine extreme graphic violence with high

realism. Although not the first media product to feature graphic violence, the game received special attention due to its inclusion of fatalities by which skilled players could commit acts of murder and molestation on injured opponents by pressing a button. These fatalities are a primary reason why the game received so much attention from popular press and politicians alike, eventually forcing the hand of major video game manufacturers such as Sega of America to release the game in stores with a recommendation that the game be played by mature audiences only (Kohler 2009). However, the movie rendition of *Mortal Kombat* [1995]—released a few years later and based on the same characters, narrative, and action of the video game source material—carried a rating of PG-13 for “non-stop martial arts combat; often very violent” (imdb.com n.d.).

***Examining differences in media type based on graphicness, realism, and justification may help untangle these changes in how violence is portrayed and accepted across media.***

We argue that examining differences in media type based on graphicness, realism, and justification may help untangle these changes in how violence is portrayed and accepted across media. For example, despite being based on the same source material, the actual graphic content of each *Mortal Kombat* incarnation was quite different, with

murders and gore taking precedence in the video game, and karate fighting techniques and artistic stunt work featured in the film. Indeed, many game developers intentionally avoid creating realistic portrayals of violent game action, possibly to enhance the fantasy elements of such video games as well as to avoid restrictive ESRB ratings. Vorderer et al. (2006) state that enjoyment in some video games genres often comes from our ability to engage in a fantasy world that we can distinguish both physically and morally from the real world. For example, both the movie and video game versions of *Street Fighter* are based on a series of street fights to stop the villain from world domination. Yet while the most popular version of the video game [1991] features bright, electric, and unrealistic animated conflicts, the live-action film [1994] relied on re-

Figure 1. *Street Fighter* live-action movie [1994]





alistic hand-to-hand stunt work simulating actual combat. Justification may similarly change based on medium type. For instance, while the perpetrator of the unjustified and unprovoked violent actions performed in *Grand Theft Auto IV* [2008] would be punished in most Hollywood films, these same actions are rewarded from start to finish in a video game. In addition, in a video game, the player is often the perpetrator of these types of acts.

Figure 2. Street Fighter II game [1991]

### Violence and Enjoyment

In general, emerging research suggests that graphicness, realism, and justification are both important and influential in explaining why people enjoy violence. Violence is neither a simply binary concept that is either present or absent, nor is it universally accepted or enjoyed, despite the popularity of violent media. Emerging evidence suggests audience members place different importance on specific features of violence as they come to understand a portrayal as violent or not.

As a result of these differing perceptions, they may come to assess the content as enjoyable or not. Clearly, increased perceptions of violence do not necessarily lead to increased or decreased enjoyment of violence. However, understanding how perceptions of violence may be elicited from different dimensions of violent content, as well as how these perceptions are related to preference for this content, is a vital concern to entertainment researchers. Therefore, we set our sights on

**Emerging evidence suggests audience members place different importance on specific features of violence – graphicness, realism, and justification – as they come to understand a portrayal as violent or not.**



experimentally determining the utility of this multidimensional definition of violence to understand impressions and appeal of violent entertainment media in both films and video games.

### **Experiment: Using Dimensions of Violence to Predict Perceptions and Preferences**

Audience perceptions of graphicness, realism, and justification are most useful in understanding their perceptions of media content as more or less violent overall, with graphicness being the most salient attribute followed in order by realism and justification. Furthermore, audience perceptions of violence may change from one medium to the next, resulting in similar content being perceived quite differently between media forms.

To test these arguments, our research team designed and conducted an experimental study that exposed individuals to either written plot summaries or visual video trailers of four fictional media products we named: *Bloody Justice*, *Blood Reign*, *Underlord*, and *Mystic Battle*. Text products were written to resemble promotions for films or games that would be common to a movie or a video game preview, and video products were created by splicing together video scenes from foreign or independent films and video games (nobody in the study reported recognizing any of the spliced footage). We specifically designed the promotional materials to imply different levels of graphicness, realism, and justification. For example, we used content descriptors such as “blood and gore,” “realistic violence,” “animated violence” to describe a film or video game as being highly graphic, in contrast to the “low graphic” versions, which did not include these descriptors. We used content descriptors such as “based on a true story” to imply high realism, or “fantasy” to imply low realism.

All video examples of the clips are available for viewing (see playlist at <http://bit.ly/SwgUTF>). Text products were written to resemble promotions for films or games that would be common to a movie or a video game preview, and video products were created by splicing together scenes from foreign or independent films and video games (nobody in the study reported recognizing any of the spliced footage). In all, we made four different versions of our clips that varied four different combinations of graphicness, justification, and realism, which allowed us to examine each attribute’s relative importance on both perceptions and preferences. Our experimental design is referred to as a partial-factorial design (see Hartmann and Klimmt 2005 for a similar methodology). As you notice, we did not include all possible combinations of all content attributes, which may appear odd. However, this type of analysis is common in research such as ours in which the primary focus is the attributes themselves rather than their combination with each other. As we were primarily interested in the relative effects of each attribute separately (rather than the combined effect of, for example, a low justified, low graphic, high realism

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preview) this was an appropriate methodology to parcel out the weight of each attribute in contributing to perception and preference for violence. (See Table 1.)

*Table 1. Incomplete Factorial Design for Conjoint Analysis*

	Realism HIGH	Realism LOW
Graphicness HIGH	Justification HIGH	Justification LOW
Graphicness LOW	Justification LOW	Justification HIGH

Note: All video examples of the clips are available for viewing here: <http://bit.ly/SwgUTF>

We invited 462 undergraduate students at Michigan State University in Lansing to participate in a study on “media preferences.” Students represented a convenient sample for us to study in part because they comprise a primary target audience for violent films and video games alike. For the experimental design, we randomly assigned students to watch or read our created materials in groups of about 20. In each session, participants were told that they were focus groups evaluating real media products that were currently in production for release later in the year. After reading or watching each of the four previews in a randomly assigned order, students were asked to complete a questionnaire that asked them to indicate their perceptions of the violent action in each preview as being more or less graphic, realistic, or justified as well as their general perception of how violent they thought the preview was, and how much they thought they would enjoy watching or playing the final product. This allowed us to measure how people perceive and prefer the three key features of violence in both film and video game form.

Audience members indeed saw the films as high or low on each of the violence dimensions as was intended, with the exception of our graphicness manipulation, in which *Underlord* (low graphicness) was rated higher in graphicness than *Bloody Justice*, (high graphicness, see Table 2). However, for

*Table 2. Variation of Factors among Previews and Means of Perceived Attributes for all Presented Text Stimuli.*

Preview Title	Extentent of Attribute in Preview			Perception of Violence in Preview	Preference for Preview
	Graphicness	Realism	Justification		
Blood Reign (BR)	High 6.41 (.89)	Low 2.41 (1.72)	Low 2.86 (2.04)	6.64 (.69)	2.66 (1.43)
Bloody Justice (BJ)	High 5.34 (1.05)	High 5.14 (1.30)	High 4.73 (1.65)	5.56 (1.01)	3.59 (1.28)
Underlord (UL)	Low 5.60 <sup>+</sup> (.94)	High 4.51 (1.48)	Low 3.11 (1.78)	6.04 (.86)	3.38 (1.46)
Mystic Battle (MB)	Low 4.83 (1.12)	Low 2.18 (1.47)	High 4.83 (1.13)	5.05 (.99)	3.51 (1.32)

Note: n = 141.

our study this was not a major concern as there was still a significant difference between the previews on other attributes. This reverse evaluation was only reported in the text condition, the video portrayals of violence varied in high or low graphicness as intended (see Table 3).

*Table 3. Variation of Factors among Previews and Means of Perceived Attributes for all Presented Video Stimuli.*

Preview Title	Extentent of Attribute in Preview			Perception of Violence in Preview	Preference for Preview
	<u>Graphicness</u>	<u>Realism</u>	<u>Justification</u>		
Blood Reign (BR)	High 5.83 (1.30)	Low 2.19 (1.53)	Low 2.87 (2.03)	4.96 (1.65)	2.74 (1.64)
Bloody Justice (BJ)	High 5.95 (1.17)	High 4.89 (1.57)	High 4.04 (1.75)	5.00 (1.69)	3.31 (1.49)
Underlord (UL)	Low 5.01 (1.36)	High 4.91 (1.39)	Low 2.92 (1.68)	4.66 (1.84)	4.03 (1.54)
Mystic Battle (MB)	Low 4.61 (1.43)	Low 2.66 (1.66)	High 4.67 (1.77)	4.59 (2.15)	3.66 (1.75)

Note: n = 299.

The primary data analysis of interest for this study was a choice-based conjoint analysis of the attributes of interest, which was specifically designed to demonstrate the relative impact of our three content attributes on preference/perception for all possible stimulus previews. In a typical conjoint analysis, study participants provide data about their perceptions and preferences for products (in our case, film or video game previews) that vary in their combination of specified attributes as ours did. These data are then used to compute a total importance score for each attribute, which tells us about the relative contribution of an attribute for either the perception of violence in a preview or the preference for a preview (i.e., to what extent did a specific attribute contribute to liking a preview across all participants) as explained in Raghavarao et al. (2011).<sup>3</sup> This same procedure can be used to provide data about perceived levels of violence for all attribute combinations, even if only a particular subset of all attribute combinations is actually observed. All total importance scores are presented in Table 4.

***The results of our experiment showed that for both film and video games, perceptions of justification for violence were the most important determinant of perceiving something as violent or not.***

#### **Perceptions of Violence: Can You Justify the Action?**

The results showed that for both film and video games, perceptions of justification for violence were the most important determinant of perceiving something as violent or not. Actions were perceived as more violent if they were also perceived as less justified. Perceptions of realism were next most important, and graphicness was the least important content attribute for making determinations about something as violent or not. This finding breaks

*Table 4. Conjoint Analysis – Total Importance Scores for all Attributes, Separated by Condition.*

Attribute	Perception		Preference	
	Media Condition			
	<u>Film</u>	<u>Video Game</u>	<u>Film</u>	<u>Video Game</u>
Graphicness	29.42	26.12	28.52	30.40
Realism	31.31	34.37	47.31 <sup>A</sup>	37.67 <sup>B</sup>
Justification	39.28	39.51	24.81 <sup>B</sup>	31.93 <sup>A</sup>
	Form			
	<u>Text</u>	<u>Video</u>	<u>Text</u>	<u>Video</u>
Graphicness	25.81	28.76	25.26	31.38
Realism	27.82 <sup>A</sup>	35.35 <sup>B</sup>	36.44 <sup>A</sup>	45.28 <sup>B</sup>
Justification	46.38 <sup>B</sup>	35.89 <sup>A</sup>	38.30 <sup>B</sup>	23.34 <sup>A</sup>

Note: Means with different superscript letters differ significantly at  $p < .05$ . All significance tests are within attribute conditions (horizontal).

from Potter's research, but is largely in line with Zillmann and Bryant (1975) who demonstrated that reactions to media entertainment were moderated by the extent to which violent retribution was justified.

Why do our data break from previous findings? One explanation is that previous work did not manipulate attributes of violence in stimulus materials. For example, in Potter and Tomasello (2003) the number of violent acts was manipulated across experimental conditions, but not the specific justification or graphicness of these acts. Potter and colleagues did not specifically examine how variance in the levels of graphicness, realism, or justification in different portrayals might influence perceptions of violence, as we did in our study. Potter's research shows that when people perceive actions as graphic, this perception is the most important determinant of their assessment of the content as violent. However, it does not tell us if actual differences in graphicness are the most important determinant of perceived violence. Our research shows that differences in the graphicness of content may not be as important as differences in justification.

Interestingly, the relative importance of Potter's attributes in shaping violence perceptions did *not* differ between film and video games as we expected. The possibility that there is great similarity in how attributes of violence are perceived across these media forms seems at odds with assertions that violence is experienced quite differently in film and video games. Many researchers focus on the fact that film audiences witness violent acts, whereas video gamers perpetrate those acts (Tamborini and Skalski 2006). Yet our data suggest that the difference in medium is not of primary importance. Our findings suggest that some aspects of research on the effects of cinematic and televised violence may well translate to video games, at least with

respect to how violent content is processed and perceived. Of course, we are careful to note that in our study video games were not actually played; rather, study participants evaluated previews of games, which may potentially limit generalization of these findings. At the same time, respondents were aware that they were watching previews for upcoming films or video games, and thus their expectations as to the type of content typical of each media form should have been primed. As well, with regard to video games, it is wholly common for individuals to watch game previews prior to playing.

### **Preference for Violence: Real Film or Just Games?**

In contrast to the consistent pattern found for *perceptions* of film and video game violence, the influence of realism and justification on *preference* for violence differed significantly between media conditions. Although realism plays a predominant role in determining preference for both types of media violence,

***Realism plays a predominant role in determining preference for both types of media violence, the strength of realism's influence on preference was much greater for film than for video games.***

the strength of realism's influence on preference was much greater for film than for video games.

We suggest that people may compare film to what they see or expect to see in real life, but compare video games to other video games. For example, a person might compare a novel game like *Blood Reign* in our study to older, less sophisticated video games like *Splatterhouse*, which have been characterized by the abstract manner in which they represented reality (Wolf 2003). This would influence preferences

because it suggests that a given film is expected to be more realistic than a given video game as audiences have different prior expectations of the two media (cf. Atkin 1985) and, as a result, might render realism to be a less important feature of video game preferences.

The opposite was true for the influence of justification, the influence of which on preference was far greater in the video game than in the film condition. Klimmt et al. (2006) offer an explanation of this finding in their work on the role of moral disengagement in the preference for video games. Their research suggests that video game players rationalize their in-game violent actions as justified by using several different strategies. Players justify in-game violence by referring to the unreality of the video game environment, the framing of game characters as evil, and the need to use violent actions to progress in-game. For example, a *Grand Theft Auto: San Andreas* player who shoots police officers may justify these actions because of the unreality of San Andreas as a place, the fact that the police are foes of the criminal main character (thus going against societal notions of justice), and the need to avoid police to finish the game. Klimmt et al. (2006) suggest in their study that players who are not able to justify their violent actions are not able to enjoy the video game experience, thus highlighting the great importance of justifica-



*Figure 3. Scene from Grand Theft Auto 4 showing police shooting*

tion in a game environment. Data from our study are consistent with Klimmt et al.'s conclusions. Although we realize that justification is important in understanding film's preference (in general, we expect films to present retribution for unjust actions as part of the justice restoration process; cf. Zillmann and Bryant 1975), we agree with Klimmt et al. (2006) who suggests that justification may be integral to understanding the preference for violent games as well.

As with all empirical research, the results of our experiment have to be considered within the bounds of their limitations. For one, individuals read or viewed entertainment media previews rather than actually viewing or playing full-feature content. Also, across our study we found ratings of graphicness to be consistently high across all media conditions, which might have limited its ability to predict perceptions of preference. In other words, as the perception of graphicness did not vary substantially across experimental conditions, its ability to covary with other variables is limited by definition.

Despite some limitations, our study offers support for the contention that violence is not a simple construct and provides additional evidence suggesting that different dimensions of media violence are important to consider in understandings of how audiences perceive and prefer such content.

Specifically, it suggests that justification matters most in determining the extent to which actions are viewed as violent. It also shows that with movies, realism matters more for preferences than with games. Audiences may not mind certain crude animation effects in the *Mortal Kombat* video games because they are part of the animated fantasy, but with film portrayals—due to their customary visual realism and their

***Our study offers support for the contention that violence is not a simple construct and provides additional evidence suggesting that different dimensions of media violence are important to consider in understandings of how audiences perceive and prefer such content.***

advanced digital effects that far surpass that of video games—they will likely expect more.

Overall, our research helped reveal important nuances about how people respond to media violence, but questions still remain. Are there features besides graphicness, realism, and justification that matter in perceptions of violence? Clearly. Does actively playing video games—versus passively consuming them, as participants in our study did—influence perceptions of violence or the manner in which these features shape those perceptions? Perhaps. And how might perceptions of and preference for violence differ in other forms of media, such as books or the Internet? Still unclear. Answering these and related questions in future work can help continue to advance understandings of entertaining violence.

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search focuses on identifying and testing the underlying processes in audience responses to entertainment. It combines media theory and cognitive neuroscience to identify the neural networks for moral judgment involved in interpreting and reacting to media narratives. Her other work examines the motivational factors influencing the success of video games for training and behavioral interventions.

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## Notes

<sup>1</sup> Both of these studies used the same definition of violence from the NTVS study (Smith et al. 1998: 30)

<sup>2</sup> See, for example, <http://www.youtube.com/watch?v=wGYjYMFZR3o>.

<sup>3</sup> The scores are computed as follows: (1) attribute utility scores for each level of an attribute for each participant (e.g., the utility of high justification for participant one); that is, the extent to which each participant weighted each attribute level to contribute to his or her overall rating of the preview on either how violent it was or how enjoyable he or she found it; (2) total utility scores for each preview for each participant, which was simply the sum of all attribute utility scores for each participant. The preview with the highest total utility score is likely to be the most preferred among all previews (including unobserved previews with attribute combinations not presented to participants); (3) attribute importance scores, the attribute utility score relative to the total utility score for each study participant, which gives a sense of how each attribute contributes to a participant's overall preferences/perceptions compared to all other attributes; and (4) total importance score, defined as attribute importance scores averaged across all participants, which tells us about the relative contribution of an attribute for the preview preferences of all participants. We present the total importance scores in text as they are the most relevant for the current questions of interest.

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