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Blood Splats and Bodily Collapse

Reported Realism and the Perception of Violence in Combat Films and Video Games

Stuart Marshall Bender

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Abstract: A clear definition of realism is understandably difficult for critics and theorists to agree upon when applied to texts such as the war film or combat shooter, which can have a very direct connection to events that have actually taken place. This article uses textual observation and analysis to advance the concept of “reported realism” as an alternate analytical tool to account for the impression of truth and authenticity produced by specific stylistic components of these representations of combat violence. Drawing on cognitivist theories of meaning and the imagination (Torben Grodal, Stephen Prince) and neoformalist film studies (Kristin Thompson) this article points toward some of the significant developments in the evolution of violence in war films as well as the adjacent genre of the first-person shooter video game. The article shows that the intensified audio-visual detail in contemporary screen representations of war enable film viewers and game players to construct more vividly imagined mental simulations, thus offering a greater affective realism.

Keywords: aesthetics, combat film, first person shooters, imagination, realism, video games, violence

One predominant aspect of the marketing material for Steven Spielberg’s World War II combat film *Saving Private Ryan* (1998) was the apparent stamp of realism given to the film’s battle scenes by veterans of that conflict. For this reason, it will prove useful to consider the comments on war film realism by two veterans who are also filmmakers. First,

Captain Dale Dye, an ex-Marine and now a military technical adviser for many contemporary Hollywood productions, explains an element of combat realism he believes is missing in cinema:

I've also got a thing about flies ... especially the flies that feed on dead bodies. It's an image that still haunts me from real-life experience but something that's never seen in films. I suppose it's hard to train flies but their presence in swarms around dead bodies leaking fluids is a stunning image that I've always thought says a lot about the brutality of war and the results of human combat. (Dye, email to the author, 31 August 2011)

Of course, there is a combination of what a neoformalist analysis would call realistic and artistic motivation (Thompson 1981) in the wording Dye uses to justify this imagery—the flies are a “stunning image” that “says a lot about the brutality of war.” However, I am interested in an aspect of Dye's description that becomes clearer when compared with another combat veteran and filmmaker, Sam Fuller. For Fuller, a veteran of D-Day, realism poses a significant problem for filmmakers:

See, there's no way you can portray war realistically, not in a movie nor in a book. You can only capture a very, very small aspect of it ... For moviegoers to get the idea of real combat, you'd have to shoot at them every so often from either side of the screen. The casualties in the theater would be bad for business ... Hell, the heavy human toll [of war] is just too much for anyone to comprehend fully. What I try to do is make audiences feel the emotional strife of total war. (Fuller 2002: 123)

These filmmakers are not cited here as a Romantic gesture toward their real-world encounters with war as a stamp of authenticity in expressing the experience of combat. Rather, the two attitudes embody the problem of realism as it pertains to the combat genre. On the one hand, we have a filmmaker (Fuller) arguing that it is only possible to “capture” an impression of battle and, on the other hand, filmmaker (Dye) hinting at the importance of minute visual details as a stylistic means of conveying that sense of realism. Certainly, theorists from Andre Bazin (1967) to Roland Barthes (1971) and Jean Baudrillard (1981) have also struggled with the concept of cinematic realism. In addition, in the adjacent field of violent video games it is common for the apparently increasing realism of their virtual violence to receive criticism, particularly in the wake of recent school shootings (Ferguson 2013).

In this article, I intend to reframe the discussion of realism onto the stylistic properties of films and video games. I propose the term “reported realism” as an analytic category that enables the viewer-critic to identify specific textual cues that prompt *claims* of realism in regard to a violent film or video game. Significantly, this argument will show that for such claims it is at times irrelevant whether or not the particular representation is authentic to real-life experience. For this reason, an analysis of reported realism offers a useful approach to understanding the effect and affect of a variety of normative stylistic techniques associated with screen texts that portray violent combat. I should note at the outset that there will always be exceptions to any normative technique. However, the value of this analytic tool is that it occupies a position somewhere between stylistic analysis and reception studies, and affords a means by which the analysis of normative textual style can be informed by the discursive comments of viewers/spectators.

[CALL OUT 1 ABOUT HERE]

Historical stories of warfare continue to provide a popular inspiration for many contemporary screen narratives in film, television, and video games. Given that contemporary audiences are able to use these texts to “actively immerse themselves in history” and “construct interpretations of past events” (Fisher 2012: 299), it is important to consider how these works portray combat violence as well as their presumed relationship with reality and realism. Indeed, as a secondary school teacher some years ago I presented the opening battle sequence from *Private Ryan* to a group of students. When asked whether or not the film seemed real—a standard hermeneutic question typical of English lessons (Bender 2008)—the majority of students agreed that it did. Upon being prompted to justify their response, one student cheekily volunteered that he had played the first-person shooter game *Call of Duty*. Clearly, such a comment is not meant to be taken seriously; however, there is a significant network of assumptions about texts, realism, and viewer perception embedded in the statement. There persists an almost phenomenological sense for many viewers as to whether or not a text feels realistic. This response to the feeling of combat realism—irrespective of the representation’s authenticity—is evident also in academic critical discourse on war films. Consider, for instance, Phillipa Gates’s description of the apparently “realistic” style of Olive Stone’s *Platoon* (1986): “The documentary feel of the combat sequences—marked by shaky, hand-held camerawork—offer[s] audiences a sense of immediacy, claustrophobia, and realism—but, more importantly, the subjective point of view of the grunts” (Gates 2005: 300). Here the critic is applying a feeling, or sensation, of realism to an aspect of the film’s style, just as Richard Godfrey and Simon Lilley (2009: 278) do in their analysis of *Private Ryan*:

Moreover, his [Spielberg's] use of handheld cameras and 35-millimetre film gives a documentary effect to the imagery, reminiscent of Frank Capra's original footage of that day, and a technique that has become commonplace in subsequent retellings of World War Two.

Interestingly, in both of those discussions of *Platoon* and *Private Ryan*, these are the only two moments when the authors comment on film style. The remainder of both analyses focuses on a critique of the films' ideological position. These types of statements are common in the literature on war films. However, the problem is that although they do serve to set an intriguing background for a discussion of the films' *fabula* and hermeneutic context, they often make misleading (or outright false) claims about the style of the works. *Platoon's* battle scenes, for instance, are not filmed in a handheld camera style at all. Instead, they primarily consist of steady tracking shots through the jungle. And Spielberg's handheld scenes can hardly be taken to resemble Frank Capra's footage since Capra was never actually at Normandy on D-Day.¹ Despite the fact that these authors were in fact writing about aspects of the films other than their style, it is telling that they seemed to be compelled to declare something about the apparent realism of the combat scenes based on a visceral reaction, rather than empirical observation of the film sequences.

In order to understand the reported realism associated with contemporary World War II combat films, I draw on the neoformalist concept of realistic motivation. This kind of approach focuses analytic attention onto the way particular cinematic devices are employed by a film as "an appeal to ideas about reality" (Thompson 1988: 17). In this view, it is irrelevant whether or not the film's narrative or style *is* a valid "imitation" of reality. According to Kristin Thompson:

Our ideas about reality are not direct, natural knowledge of the world, but are culturally determined in various ways. Thus realistic motivation can appeal to two broad areas of our knowledge: on the one hand, our knowledge of everyday life gained by direct interaction with nature and society; on the other, our awareness of prevailing aesthetic canons of realism in a given period of an art form's stylistic change. (1988: 17)

This is not to take an abstract view of realism. My analysis proposes an examination of the stylistic techniques used by a particular contemporary genre, which seems to result in audiences regarding the films as realistic. For instance, regardless of the commentary by many viewers, the shaky handheld camerawork of *Private Ryan*'s Omaha Beach sequence does not correspond to real human vision *or* real combat footage. Human vision does not shake, even during rapid head movements, because our vestibulo-ocular reflex serves to counteract the movements of the head in order to maintain a stable image of the world (Leigh 1996). Certainly, damage to the vestibular system can result in blurry vision. However, firsthand accounts suggest this blurriness is less like an energetic handheld camera and more akin to the kind of point of view shots films occasionally use to show the perspective of either a drunk character or one being knocked unconscious, such as when Marlowe is punched in the face during the first-person sequence of Robert Montgomery's 1947 film *The Lady in the Lake* (Crawford 1952). In addition, Toby Haggith (2002) has shown extensively that footage by real-life combat camera operators does not resemble the handheld look of contemporary combat films in any meaningful way. Against this background then, it is worth considering exactly how violent texts might provoke such claims—or reports—of realism (Bordwell 1985).

Rougher and More Detailed

A simple observational comparison of a group of combat films will ground the following discussion of style in a concrete context. The films I have chosen are a sample of convenience: *Back to Bataan* (Edward Dmytryck 1945), *Objective, Burma!* (Raoul Walsh 1945), *A Bridge Too Far* (Richard Attenborough 1977), *Saving Private Ryan* (Steven Spielberg 1998), and *The Thin Red Line* (Terrence Malick 1998). Relevant example clips have been edited into a brief compilation.² Although the clips in this compilation should not necessarily be regarded as purely representative of their respective eras of production, their juxtaposition throws into very sharp relief the key developments in style between the wartime productions and the contemporary films. It is also significant to note that, as James Chapman (2008: 63–64) argues, many 1940s combat films were critically received as realistic in their time. Limited space here provides for only a summary of the differences, however during the discussion I will refer to some of the results of the normative analysis (Bordwell 2005) of a greater range of texts available in my book *Film Style and the World War II Combat Genre* (Bender 2013).

[CALL OUT 2 ABOUT HERE]

The key difference in style between the two eras of production is that there is an increasingly roughened and more detailed aesthetic predominant in the contemporary films and, as I show later, this is the key reason why viewers commonly report the contemporary productions as more realistic. Consider for instance the significantly increased use of handheld cinematography in the contemporary productions. Compared with the tripod-mounted camera of *Objective, Burma!* or *Back to Bataan*, Spielberg and Malick's cameras are frequently moving, panning or tracking with a coarse bounciness through the battlefield.

There is also a progressively heavier layering of sounds within the audio mix, which is apparent in how simplistic and repetitive the mono soundtrack of the 1940s films (timecode: 00:40–00:50) seems in contrast with the overlapping machine guns, bullet impacts, and atmospheric yelling of the soldiers in *A Bridge Too Far* and *Thin Red Line* (timecode: 01:35–02:16). One respect in which the aesthetic of the contemporary films is distinctly roughened is in the actors' performances. The verbal and nonverbal acting styles of Errol Flynn, John Wayne, and the other 1940s performers are remarkably rigid in comparison with the loose movements of the later actors.³ Perhaps most noticeable is that the “clutch-and-fall” death performances identified by Stephen Prince (2003) in the 1940s films become increasingly physicalized by the time of *Saving Private Ryan* in 1998 (timecode: 00:40–00:42 and 00:26–00:36).

Before addressing how this contemporary aesthetic provokes a sense of realism I will briefly account for some of the key reason(s) these changes in style have occurred in the intervening half century between the two eras of production. Censorship may seem to be an obvious explanation for some of the major differences observed in the depictions of violence, but the influence of such regulation should not be overstated. For instance, Prince has argued that for war films made during World War II in the United States, the Production Code Administration was more “flexible” on battlefield violence “because it provided for greater realism and authenticity,” but would be less flexible in a gangster film where the same kind of violence “would be seen as exploitative and in bad taste” (2003: 163–164). Quite specifically, the 1943 film *Bataan* (Tay Garnett) occasionally uses squib hits on actors to produce a small puff of gray smoke to show the impact of a bullet (figure 1). The increased saturation of detail we observe in the depictions of violence can also be linked to both convention and defamiliarization (Bender and Broderick 2014; Thompson 1988); what is considered realistic in one era is unlikely to achieve realistic impact in another (Prince 2009).



Figure 1: A puff of gray smoke blasts from a small squib hit explosive in this actor's death in *Bataan*. The bodily reaction is a slow slump-and-fall variation of the era's clutch-and-fall aesthetic.

Arguably, the loose performance style of the contemporary actors is at least partially the result of the influence of the Method school of acting—derived from Konstantin Stanislavski's theatrical rehearsal techniques for actors (Bender 2012). This tradition has ties to the privileged status of naturalism and spontaneity (however they may be defined) within much broader discourses of contemporary filmmaking and film reception. Related to these apparent markers of performance authenticity is the premium placed on the actor's *experience* and, in fact, one of the key aspects of performance in today's combat films is a particular form of actor rehearsal, which emphasizes an immersion in the military experience. This immersion often takes place in improvised "boot camps" run by civilian military technical advisers such as Dale Dye (Suid 2002). But these cultural influences only partially account for the observed roughness in the screen performances. Also relevant is the invention of more mobile sound recording devices. Whereas Errol Flynn would have to stop in a very specific position for his voice to be recorded by the 140 pound overhead microphone

(timecode: 01:13–01:20), Tom Hanks and other contemporary actors are likely to be “close-miked” with a radio microphone or overdubbed in postproduction and so their movements are much less constrained when acting out the scenes of combat (“Technical News” 1944: 69).

These aesthetic properties of combat texts should be taken into consideration in order to understand the ways in which these films achieve their impact on the audience. After all, as Tamborini and colleagues (2013: 100–101) argue, screen violence “is not inherently enjoyable,” and even though “audiences cringe” at scenes of brutality the fact remains that many violent films and video games achieve high levels of popularity.

The Imagination, Mental Simulation, and Detailed Aesthetics

The tendency toward an increasing quantity of detail is bound up with the activities of perception and cognition by which viewers comprehend the narrative events depicted in the films. Perception and cognition are central to Bordwell’s (1985: 30–47) account of comprehension in *Narration and the Fiction Film* as well as Thompson’s neoformalism (1981, 1988). According to Bordwell, a Constructivist theory of how viewers make sense of films would argue that: “The artwork is necessarily incomplete, needing to be unified and fleshed out by the active participation of the perceiver” (1985: 33). This active participation involves an ongoing process of inference making, and further work in cognitivist film studies has developed these arguments. For instance, in *Narrative Comprehension and Film*, Edward Branigan argues that the spectator’s comprehension of a film occurs through a process of “moment by moment regulation of conflicts among competing spatial, temporal, and causal hypotheses” (1992: 39).

Other researchers have enlisted the concept of the imagination as a way to explain viewer engagement with the narrative of the film. This is not to suggest that the spectator imagines the events on screen are really happening, nor is it a prescriptive account of how

certain films become more engaging than others. Rather the theory explains how viewers use the on-screen information to imagine a unified, complete *fabula*: “My imagining is not that I [actually] see the characters and the events of the movie; it is simply that [I imagine] there are these characters and that these events *occur*—the same sort of impersonal imagining I engage in when I read a novel” (Currie 1995: 169). However, the theory could easily be confused as suggesting that the spectator imagines the diegetic events happening within their presence. To counter such misconceptions, Noël Carroll makes the following clarification: “Instead of seeing imaginarily, I *literally* see representations of actors on screen, which I use to imagine the fiction” (2009: 200). Currie (1995: 146–150) would argue that in order to fulfill this process of imagining the fiction, spectators run an offline mental simulation of the narrative events.

[CALLOUT 3 ABOUT HERE]

These concepts have also been used by cognitivist theorists primarily to understand (and debate) how viewer identification and empathy functions (see Coplan 2009; Frome 2009). The argument presented by Torben Grodal (1997, 2009), for instance, parallels Currie’s in some respects, but diverges in others. His position—which derives also from evolutionary psychology and neuroscience—suggests that films are themselves simulations and offers a theory of how the spectator’s mind tags the input from the films according to a particular “reality status” (Grodal 2009: 101). For Grodal,

The fundamental architecture of the brain was made at a time when incoming data were essentially true, so that reality status evaluation was a secondary process and the later cultural development of visual (and acoustic) simulations [such as cave paintings

and stories] made it necessary to contain the impact of such simulations by higher order cognitive processes. (2009: 185)

For Henry Bacon (2009: 79–80), the imagination “has tremendous evolutionary advantage” in that it enables humans to mentally rehearse for potential future situations as well as predict behaviors of animals during hunting, for example. From the cognitivist perspective, many of these capacities that have evolved for various purposes also happen to enable humans to comprehend cinematic texts (Grodal 1997). The argument below extends the work of these theorists via a much more narrowly focused account of some specific activities of filmmakers and video game developers and the resulting effects of reported realism.

I believe the increased level of detail that is evident in the contemporary combat films allows viewers to run an off-line mental simulation of the diegesis with a high degree of vividness. As a result of this richly detailed and nuanced imagining, the impression of the film’s realism is greatly increased. For instance, the extremely dense soundtrack of *Ryan*’s Omaha Beach scene contributes to the great sense of immersion reported by many viewers because they are able to imagine bullets hitting the sand and slicing through the water. This is not to say that viewers imagine *being there* in the battle, but that they have an “impersonal imagining” (Currie 1995) of the fiction as something that is happening. Arguably, this response occurs primarily because there is a substantial amount of sonic information for the spectator’s imagination to use to simulate the diegesis. Consider also some of the minor physical movements in the performance of the German soldiers in this sequence, in contrast with the simplistic and far less detailed movements of the enemies in the 1940s films. For example, as Pvt. Jackson runs to the flank of a machine gun nest, a cut to a Long Shot presents three Germans in the machine gun nest just as one of them taps the middle gunner on

the top of his helmet. The middle gunner then shifts his aim and continues firing in the direction of Jackson's movement. The spectator's imagination is able to perform two activities here. First, an attentive viewer might fill in the gap of what is not stated verbally—that is, that the middle gunner recognized the tap by his comrade as an indication of enemy movement. Second, the German's action adds further detail to the simulation being run by the spectator's imagination, along with many other highly detailed aspects of the scene such as the sand caked on Miller's helmet, the background voices of other soldiers on the beach, and so on.

Recalling the neoformalist concept of realistic motivation, the details presented need not necessarily correspond to actuality. Rather, the details simply need to appeal to the audience's expectations of reality. These expectations, of course, are dependent on the viewer's world experience as well as experience with other texts. Although I am not primarily concerned with narrative here, the principle would apply to comprehension of the narrative events. For instance, director Peter Berg claims in the commentary track of his film *The Kingdom* (2007) that it received criticism from everyday viewers who regarded it as unrealistic that the terrorists' bullets never hit any of the main characters in a crucial firefight scene. However, Berg claims that when he screened the film for Navy SEALs they suggested that this matches their experience with these sorts of terrorists who have the tactical strategy of shooting blindly (Berg 2009). The everyday viewers then, have expectations that may not match up to the reality of the events depicted.

In terms of gunshot violence, the norms of on-screen combat deaths have clearly changed from the clutch-and-fall style of the 1940s, through the spasmodic reactions of the 1970s, to the sudden jerking motions of the 2000s. Each successive iteration of these conventions introduces greater detail into the depiction of death. The visual display of the bullet impact and the accompanying flesh hits and grunt reactions on the soundtrack are

constitutive of such increased details. A related aesthetic development is the trend, starting with Sam Fuller's *Verboten* (1959), for high numbers of corpses to remain as part of the *mise-en-scène*. It is likely that the apparent, or reported, realism of the contemporary deaths is largely an effect of the viewer's ability to imagine (and mentally simulate) the death due to the quantity of details offered by the representation. Indeed, Sam Peckinpah's infamous bullet hits—produced by squib hits blasting chunks of raw meat as well as the fake blood fluid—seem all the more grotesque and realistic precisely because of the detail in their presentation (Cook 1999: 144–145). Compare this with Dale Dye's views regarding on-screen combat killings:

I'd love for filmmakers to re-think the special effects gore and splatter that they all seem to think result from gunshots or shrapnel hits on the human body. It's really a relatively mundane event [in real life]; the killed or wounded man usually just crumples and drops like a puppet with strings cut rather than jerking and dancing with the impact of rounds or shrapnel. It's generally only then that the bleeding starts. Despite that fact, filmmakers have been taught—or decided for the visual impact—to fill the scene with exploding squibs and blood bags. (Dye, email to the author, 31 August, 2011)

Dye's perspective is significant in terms of understanding the cognitive perception of realistic screen deaths. His description of a victim's body, which "drops like a puppet with strings cut," matches the visual appearance of the victim in Robert Capa's famous photograph from the Spanish Civil War titled "Loyalist Militiaman at the Moment of Death" (1936).⁴ But the killings in World War II combat films I have examined do not significantly resemble Capa's image or Dye's description. Victims in contemporary films, even in genres

other than World War II combat films, die in extremely detailed depictions. For instance, bullet hits to the body are presented via huge puffs of blood and dust, which explode from their chests in *Ryan*, and spasmodic bodily convulsions in *The Thin Red Line*. In Walter Hill's action film *Last Man Standing* (1996), Bruce Willis's Colt .45 pistol shots blast victims straight through the windows of a whorehouse. Examples such as these develop and extend the style of substitutional emblematics identified by Prince (2003) in the 1940s films. Rather than using scenery damage or puffs of gunsmoke as stand-ins for the damage to the human body that is not displayed—as in the substitutional emblematics of the 1940s films—these contemporary killings show the damage to the body as well as the scenery in a display of details. An extreme example is the detailed computer-generated imagery of David O. Russell's Gulf War film *Three Kings* (1999) in which a single bullet is shown entering a human body and, via photorealistic animation, lodging in an internal organ where bile and bacteria begin to spread.

Although I do not think that filmmakers are practicing cognitive theorists, in some respects they do seem to show an awareness of the value of increasing the details on screen as a way to strengthen the credibility of the film. It is possible to read the pseudo-boot camp training of actors as deliberately intended to amplify the details in the actors' performance in all areas of soldiering. This is evident in simple aspects of performance style such as the contemporary actors speaking much more, and with much more vocal range than in the 1940s films. But it is also evident in more subtle movements such as background actors conducting more detailed business such as reloading weapons, communicating via field radios, and looking around for the enemy with much more focus and attention than in the earlier films (figure 2). This in turn suggests an implicit understanding of the audience's ability to mentally simulate narrative events via presence of elaborate details.



Figure 2: As Errol Flynn gives orders to his men in *Objective, Burma!*, the background actors stay still in rigid positions.

A counterargument to this theory of simulation and imagination may be that it is perhaps more effective for filmmakers to leave gaps for viewers to imagine, or that some directors intend the viewer to be left with a sense of ambiguity. Such a claim would misunderstand my position here because I am not adopting a prescriptive attitude toward filmmaking practices. Rather, I am offering a descriptive account of what the contemporary films actually look and sound like in contrast to the 1940s combat films, and speculating on a very specific effect that seems to be achieved by the contemporary aesthetic. From this perspective, it is irrelevant whether or not the films would be more effective if viewers were expected to imagine their own details. Another caveat to make is that in discussing the effect of *details* I am not necessarily referring to image quality or clarity. Although the shaky, bouncing camerawork of a contemporary combat scene may have less visual clarity than the stable, tripod-mounted framings of *Objective, Burma!* or *Back to Bataan*, I propose that the greater “visual activity” (Cutting et al. 2012) associated with this kind of hyperkinetic filming

provides greater visual information. For instance, Malick's rapidly panning camera in one bunker attack sequence of *The Thin Red Line* enables very brief glimpses of different parts of the action, which enable the viewer to imagine a richly detailed diegesis (timecode: 02:00–02:14).

A Parallel Case: Combat Video Games

The adjacent medium of first person shooter (FPS) video games exhibits a remarkably similar transition toward increased visual and auditory detail within a much shorter time frame.

During the 19 years of video game design between 1992's *Wolfenstein 3d* (Id Software) and 2011's *Battlefield 3* (DICE Software) there is a clear progression toward increasingly detailed visual and auditory depictions of the virtual world (figures 3 and 4). Discursively, there is also a tendency for the successive developments to be regarded as becoming increasingly realistic. Consider this prerelease review of *Battlefield 3*, in which the writer anecdotally recounts showing some demo gameplay footage to friends:

[They] thought they were watching some sort of First Person-style movie that had been shot about the wars in Afghanistan/Iraq ... Just before the end, I broke the news to them that what they were watching was in fact, actual gameplay from the new *Battlefield 3* game due out this Fall ... and they were basically awestruck by the reality of it all. (Smythe 2011)



Figure 3: Simplified graphics and interface in the first person shooter *Wolfenstein 3d*.



Figure 4: Contemporary combat graphics and perceptual realism in *Battlefield 3*.

While this comment is certainly revealing in regard to the use of contemporary war films as a means of grounding the game's "look" in familiar terms, the reported realism is quite clear. The changing appearance and sound design of combat games over the past two decades has implications for understanding player immersion and engagement. Many examples of gameplay screen recordings can be found online, however I have assembled an edited video clip of relevant gameplay to illustrate a number of the following aesthetic properties.⁵

In terms of graphic presentation, while the *Battlefield 3* screen-shot is clearly not identical to a photographic image from a film, its level of photorealism is much higher than the *Wolfenstein 3d* screen image. For instance, the objects in the *Wolfenstein 3d* screenshot are clearly pixelated, suggesting a computer-generated image as opposed to the more smooth high resolution graphics of *Battlefield 3*. There are other contributing factors that classify *Battlefield 3* as possessing what Prince would describe as “perceptual realism,” which is “the replication via digital means of contextual cues designating a three-dimensional world” (2012: 32). For example, the lighting effects exhibit shading qualities, casting shadows to indicate an off-screen lamp post and building. By contrast, the *Wolfenstein 3d* shadows are simplistic and inconsistent. The soundtrack is also much more densely layered in a contemporary FPS: the player experiences a greater range as well as quantity of off-screen yells and higher quality gunshot samples, to name two obvious aspects (compare timecode 00:00–00:13 with 00:17–00:23). For some people engaging in online multiplayer scenarios, there is also the added detail of players’ verbal communication through their headset microphones. Of course, increases in computer technology have allowed game developers to produce these audio-visual representations. Although the technology has certainly been a factor, I am interested here in articulating the *specific effects* of these technological advancements, as well as identifying the ways in which these effects enable a greater level of reported realism for the contemporary FPS games. It should be remembered that the details themselves do not necessarily need to be realistic to provoke reports of realism from the audience. As *The Onion* ironically suggests in its parody on the FPS genre, the following is unlikely to be considered enjoyable by commercial consumers:

Ultra-Realistic Modern Warfare Game Features Awaiting Orders, Repairing Trucks:

Designers say the new game explores the endless paperwork, routine patrolling a

modern day soldier endures in photorealistic detail. (“Ultra-Realistic Modern Warfare” n.d.)

[CALL OUT 4 ABOUT HERE]

A useful starting point then, is Clive Fencott’s observation in the 1990s that the phenomenon people regard as “presence [or] the feeling of *being there*” when experiencing virtual reality environments (VREs) results partially from particular details of the environment which he labels “sureties” (Fencott n.d.). Such sureties are things that persons interacting with the VRE would find predictable based on their experience of the real world. Interestingly, for the participants in Fencott’s study, the details did not need to correspond photographically to the real world in order to create the sensation of presence. Fencott describes presence as a “mental state ...the mental constructions that people build from stimuli are more important than the stimuli themselves.” Joseph Anderson and Barbara Fisher Anderson (2007: 11) argue:

A virtual world can apparently be realistic or not; it doesn’t seem to matter. What matters is that a configuration of technology presents information simultaneously in multiple sense modes with the potential for participant interaction, as when the participant turns his head or walks or reaches, and the information changes appropriately.

Fencott’s focus on the mental construction created by the person interacting with the VRE is clearly connected with the cognitivist notion of running an offline mental simulation. Indeed, Grodal suggests from a cognitivist view that even “visually crude video games such

as *Pac-Man* (Namco/Midway 1980) might provide strong immersion because of their activation of basic visuo-motor links” (2003: 132). The sensation of presence seems to be possible by way of even simplistic details, which only need to approximate real-world cues, but also because the interactive nature of a game enables the human capacity of “play,” which Grodal (2003: 140) suggests has an evolutionary basis. Such studies prompt the question: Why do increased photorealistic details, higher resolution graphics, and so on, generally lead to a greater level of reported realism?

Detailed Depictions and Enhanced Presence

Reported realism in a video game is at least partially a result of an enhanced sense of presence—as game details become more nuanced and offer greater information, the player’s imagination is able to run an increasingly vivid mental simulation of the game world. Peter Bell, in a comparison of *Doom* (Id Software 1993) and *Quake II* (Id Software, 1997), briefly indicates some aspects of *Quake II*’s style, which make it seem more realistic than the earlier FPS:

It is only through a comparative difference that one is more “realistic.” For example, in *Quake II*, enemies jump out of the way of gunfire, whereas, in *DOOM*, enemies are more or less armed, stationary targets. *Quake II* also uses a more advanced graphics engine than *DOOM* does. While *DOOM* superimposes two-dimensional characters (called “sprites”) against a background, *Quake II*’s graphic engine depicts figures in three dimensions through the use of polygon modelling. (2003: 14)

Consider the artificial intelligence of the *Quake II* enemies when they are aware of gunfire. This is akin to the *effect* of the difference between *Objective, Burma!*’s enemy who

fumble and move awkwardly and the German gunner in *Ryan* who taps a comrade on the helmet. Of course, greater photorealism in a game's graphics has a clear impact on the viewer's ability to imagine the world of the game, but there are more subtle details to be taken into account. For instance, when a computer-controlled character moves out of the way of incoming fire, or is shot and collapses to the ground in early FPS games, the actual animation of the character's movement is simplistic and minimal. This is also strongly evident in the *Medal of Honor* (Electronic Arts 1999) clip in the edited video I referred to earlier (00:34–00:36). By contrast, in the more recent games character movements—particularly the bodily performance of death—is much more richly detailed (00:04–00:08). *Call of Duty: Modern Warfare 3* (Infinity Ward 2011) features wounded characters sometimes writhing on the ground after being shot. In *Battlefield 3*, when an explosion occurs in close proximity to a character, he may stagger and flex an arm outward to brace his body for a fall to the ground, which is in stark contrast with the cartoonish “flip” in reaction to an explosion in *Medal of Honor* (timecode: 00:21–00:23). Getting to their feet again, a character is animated to the extent of putting one arm to the ground and pushing upward. When this character takes cover behind an object, his body transitions from upright position through a number of animated stages (figure 5). Sometimes there is more than one version of the animation for such moves, increasing the apparent randomness (or spontaneity) of the characters' actions. The promotional material for *Battlefield 3* credits this level of animation to particular plugin called “ANT” (Animation Toolset) used by their game-engine to run the game:

The ANT technology also enables DICE to ditch the ugly gliding soldier animations that plague every multiplayer game on the market. Soldiers ...now move with a

degree of realism, turning their heads and guns before their bodies, transitioning aggressively into and out of cover. (“Battlefield 3 Game Informer” n.d.)



Figure 5: Contemporary animations of character movements in FPS involve a greater range of detailed movements than before. Source: www.battlefield.com/au/battlefield3/1/frostbite2.

Linked with these preanimated movements, contemporary games also make use of “ragdoll physics” to produce dynamic interactions between characters and their environment (Ghodsí and Wilson n.d.; Watkinson 2009). This technology enables game designers to set up a virtual bone system with specific constraints within a character’s body, which are driven by algorithms that move the bones in response to collisions with the environment. For instance, a character hit by a bullet in the shoulder may spin one way to the ground, whereas if hit in the head, knee, or shoulder he will react differently. These physics animations do not necessarily emulate (or have to emulate) real-world physics. As Thomas Jakobsen argues in his description of a physics engine he created for the game *Hitman: Codename 47* (IO Interactive 2000):

The important goals are *believability* (the programmer can cheat as much as he wants if the player still feels immersed) and *speed of execution* (only a certain time per frame will be allocated to the physics engine). In the case of physics simulation, the

word believability also covers stability; a method is no good if objects seem to drift through obstacles or vibrate when they should be lying still, or if cloth particles tend to “blow up.” (Jakobsen n.d.)

These goals indicate why early ragdoll physics—including those of *Hitman: Codename 47*'s—seem primitive by comparison to the recent character reactions in *Battlefield 3* or *Call of Duty: Modern Warfare 3*. As computer processing power and dedicated graphics card technology improves, game engines are able to run physics models that encompass greater numbers of constraints, greater rendering requirements, and therefore produce more detailed character movements. To augment the work of the animation teams, video game developers also incorporate motion capture (mocap) technology to digitally record the bodily performance of actors. Often the vocal performance is also captured and these recordings are used to drive cinematic narrative scenes in the games. Indeed, in the case of *Call of Duty: Ghosts* (Infinity War 2013), an ex-Navy SEAL combat dog undertook a mocap session to provide movement data for the canine character “Riley.” The significance of mocap for game realism is that, as Prince argues in relation to motion capture technology used for digital characters in films, the actor “remains a part of the digital character even though the actor is not truly on camera throughout the scene” (2012: 116). Therefore, the technology enables digital characters to be “embodied” with the minor details and spontaneous gestures of a real performance.

[CALL OUT 5 ABOUT HERE]

There are other details afforded by the increase in technology, such as the resolution in “texture maps.” These are images of surface textures, such as concrete, grass, and wood

which are “mapped” (digitally applied) onto a computer-generated object. Often texture maps are photographs of real-world textures and therefore the earliest uses of them were restricted by how much resolution could be produced on screen in real time. More recent developments also include “bump maps”—additional textures that produce the impression of bumps, scratches, and other three dimensional properties on a texture—that are revealed according to the virtual lighting.

In an area associated with video games, virtual heritage visualization, some researchers have noted that participants in virtual reality environments often rate “interactivity, tasks, and some idea of other people” as more important than the photorealism of the graphics (Champion 2004: 49). It is therefore important to distinguish the saturation of details I am describing from the simplistic notion of photorealism. Particularly significant for realism is the impact of some relatively nonobvious details of visual texture such as the density of terrain decoration and changing weather conditions. For instance, Johan Andersson (2011a) of DICE Software has explained the value streaming the textures in *Battlefield 3*'s during gameplay rather than pre-loading them into memory beforehand. This streaming technique offers the game makers the opportunity to assign a large range of unique textures to different parts of the game environment instead of relying on a few repeating textures. In addition, the game developers take into account how the environmental details affect player interaction. For example, the terrain decoration—which controls the quantity of elements such as vegetation on the ground—can be adjusted to different levels depending on the user's graphics processor (figure 6). However, it is not possible to turn it off entirely as “it would be too easy to see everyone hiding in the grass” (Andersson 2011a) and therefore this would have a detrimental impact on the feeling of immersive realism during the multiplayer experience. These texturing capabilities seem to have been expanded in the recent upgrade to the engine (called Frostbite 3) for the 2014 release of *Battlefield 4* (DICE), which features

changing weather conditions. For instance, during a multiplayer match titled “Paracel Storm” that takes place in an archipelago near China, the bright sunny daylight can change to a dark gray-skied rain storm. While the wind blows the trees and ground vegetation around wildly, the rain also obscures the player’s vision. All of this creates a convincing sense of the “smoke and dust” Peter Maslowski (1993: 73) describes in a real combat zone, which prevents a clear view of what is happening. These examples suggest that developers seem to have discovered techniques for producing a greater level of reported realism and these techniques are predicated on increasing the details presented by the virtual construction.



Figure 6: Demonstration of the detail options for terrain decorations such as grass and other vegetation in *Battlefield 3*. Source: Andersson (2011b).

Conclusion

A clear definition of realism is understandably difficult for critics and theorists to agree on when applied to texts such as the war film or combat shooter, which can have a very direct connection to events that have actually taken place. The problem becomes more confusing

when the differences between narrative and style are taken into account. After all, no real-world version of *Private Ryan*'s closing battle at Ramelle took place during World War II because the town is fictional. However, the physical movements of the performers in that film can be regarded as more true-to-life than the stylized movements of the actors in *Wake Island* (John Farrow 1942), *Bataan*, or *Objective, Burma!* I believe it is the quantity, indeed the saturation, of audio-visual details in contemporary screen representations of combat that elicits a sensation of realism by enabling audiences to imagine the fictional events via increasingly vivid mental simulations. For example, World War II video game *Brothers in Arms: Hell's Highway* (Ubisoft 2008) has quite detailed gore, showing bodily dismemberment from explosions and slow motion head shots of bloodied explosions of cranial matter. However, even though the quality of these violent animations is not as photorealistic as the recent *Battlefield* or *Call of Duty* games, the detail of the violent depictions prompted controversial claims of realism from audiences at the time (Klepek 2008).

One of the striking ironies associated with some nonrealistic camera techniques used in combat scenes is that these have generally been employed as a means of enhancing the impression of "combat reality." For instance, John Huston's practice of hitting the camera with his hand to simulate or augment a nearby explosion in the staged battles of *Battle at San Pietro* (1945) seemed more like battle footage to military commanders than the more stabilized footage shot by the AFPU or Signal Corps cameramen in actual battle conditions (Haggith 2002: 336; Ed Montagne, cited in Schickel 2000). Contemporary audiences, too, seem to regard the style of modern films as closer depictions to what a battlefield is "like."

Indeed, the discourse of public reviewers' commentary on *Ryan* carries a distinctly Bazanian flavor. After all, the common response summarized by Basinger (2003: 253) as "Hollywood finally tells the truth" is clearly informed by teleological assumptions that

filmmaking practice has developed toward a realistic representation of infantry combat violence.

The theoretical construct of reported realism I have advanced here offers a further means of locating the textual devices that create an effect of credibility that is regarded by audiences as realistic. It is also a useful analytical tool to understand the affective properties of representations that are regarded as realistic even if some audiences have no way of knowing this to be the case. For instance, when blood smears appear on the camera lens in a contemporary combat film it may be regarded as a realistic touch by many audiences even though it is likely that such footage would not be used in an edited newsreel shot by a real combat cinematographer (Haggith 2002). In the same way, it does not matter that the actual look of handheld filming in contemporary combat films does not resemble documentary or newsreel footage, because the cultural idea of what documentaries and newsreels “look like” is that they have wobbly handheld camerawork (Bender 2013). Indeed, Thompson anticipates these concepts when she summarizes the way realistic motivation in a film affects the film’s reception:

Motivations are sets of cues within the work [film, novel, etc.] that allow us to understand the justification for the presence of any given device. If the cues ask us to appeal to our knowledge of the real world (however mediated that knowledge may be by cultural learning), we can say that the work is using realistic motivation. And if realistic motivation becomes one of the main ways of justifying the work’s overall structures, then we generalize and perceive the work as a whole as realistic. (1988: 198)

[CALL OUT 6 ABOUT HERE]

Reported realism, then, adopts the neoformalist notion of realistic motivation and connects it to the cognitivist case for imagination and simulation. As I indicated in the introduction to this article, we should not expect every text to fit the model and therefore it is worth considering potential counterexamples. For instance, some readers may wonder how contemporary action combat films such as *The Expendables 2* (Simon West 2012) or *Rambo* (Sylvester Stallone 2008), can be accommodated by such a theory. The stylistic presentation of violence in these two movies certainly exhibits the same characteristics of saturated detail, however it would be difficult to find a viewer claiming these films are realistic. I believe this speaks to the problem of style and narrative. Stylistically, the densely layered soundtrack of gunshots, yelling, and bullet impacts during the Expendables' attack on a compound in the opening scene of *The Expendables 2* are accompanied by detailed blood splats and forceful bodily convulsions by stunt performers. However, at the level of narrative, this sequence also features blatantly unbelievable events. For instance, the lead attack car spinning around 180 degrees to use its more armored rear end, which perfectly aligns with the defense barriers set up by the enemy, who seem to offer no meaningful resistance to the onslaught of the protagonists (figure 7). Moreover, the comedic performances throughout the film are clearly transtextual caricatures of the 1980s action film characters played by *The Expendables 2* stars such as Sylvester Stallone, Chuck Norris, and Jean-Claude Van Damme.



Figure 7: Coming soon—the super-saturated aesthetic of *The Expendables 2* fails to prompt claims of realism due to its conventional Hollywood action genre narrative events.

Although the concept of reported realism points the way to a much more thorough examination of the techniques by which such texts may cue a sense of realism for spectators, problematic texts suggest that the analyst must take into account the importance of genre and narrative. However, these problems certainly indicate potential areas of future research, for instance a consideration of the ways in which the audience's prior knowledge affects their ability to imagine the fiction (Bacon 2011). Arguably, an audience member who knows something about Omaha Beach (or the Guadalcanal) is likely to come to a combat film with a greater amount of detail for their imagination to use in the mental simulation. Future research should consider the application of reported realism to violence from noncombat texts. For instance, the head-crushing scenes in both *Irreversible* (Gaspar Noé 2002) and *Drive* (Nicolas Winding Refn 2011) which have certainly generated claims of realism (Perushek 2011; Schembri 2004) despite the supervising sound editor of *Drive* claiming there is no real similarity between the sound of a movie fight and that of a real fight (Engber 2012). Therefore, while reported realism should not be taken as a totalizing theory of textual style, it certainly offers a useful methodology for the analysis of film and video game style, which

draws attention to the significance of aesthetic characteristics associated with greater audio-visual detail.

Stuart Bender, PhD, is a filmmaker and screen researcher based in Perth, Western Australia. He currently teaches in the Department of Film, Television and Screen Arts at Curtin University. His films have been shown internationally and have been nominated for a number of awards, including “Best Use of Visual Effects” at the WA Screen Awards (*The Argentinian Escape*, 2013 and *Homecoming* 2014) and “Best in Show” at the 2011 Action On Film Festival in California (*Double Cross*). His research work is concerned with digital representations of violence and war (*Film Style and the World War II Combat Film* [Cambridge Scholars Publishing, 2013]).

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¹ It is possible that Godfrey and Lilley are thinking of Robert Capa, who was a photojournalist that did land (briefly) at Omaha Beach with E-Company. His blurry, “slightly out of focus” still photographs have become iconic of the battle. See his memoir for more on his combat photography experience (Capa 1947).

² See <https://vimeo.com/87178676>.

³ “Rigid” is a descriptive term and should not be taken to mean “wooden” in a pejorative sense here. I provide more detail, and more comparison clips, in my online article in *Interactive Media Journal* (Bender 2012).

⁴ Interestingly for the current argument, there is in fact some controversy regarding the authenticity of Capa's photograph, some researchers suggesting the death is faked. However, there is also compelling evidence to suggest that the image, and the death, is real. For researcher Richard Whelan (2002: 53–54), most compelling is the analysis by Capt. Robert Franks, a homicide detective, who comments on details of the subject's hand position and foot stance.

⁵ See <https://vimeo.com/87178677>.