Title: Playing for Hate? Extremism, Terrorism, and Videogames

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Abstract:

Although the production of videogames by extremist and terrorist groups has markedly

declined since a high point in the 2000s, game-based interventions remain highly significant,

whether through the adoption of gaming-based iconography in extremist and terrorist social

media campaigns or through the activity of modders and groups' supporters who continue to

make games championing extremists and terrorists. Building on Conway's 2017 call to look

anew at the nexus between violent extremism, terrorism, and the internet, we problematise

existing work on the use of videogames by extremists and terrorists. First, we argue that

research needs to move beyond viewing games as tools for recruitment: seeing videogames as

sources of propaganda that work to reinforce the views of those already empathetic to and/or

attuned to a group's messages significantly expands our understanding of the

interrelationship between players and extremist and terrorist videogames. Second, we argue

that the present literature – whilst impressive – has overly privileged the "reading" of in-

game representations, at the expense of attention to the central role of *interactive* gameplay in

promoting the strategic communication and propaganda aims of a group. It is through the

undertaking of in-game actions that a player comes to experience a group's values and aims.

Research on videogames, extremism and terrorism is at a nascent stage – this article seeks to

provoke further thinking and open up spaces for debate in this crucial, yet understudied, area.

Keywords: Terrorism; Extremism; Videogames; Propaganda; Interactivity

Introduction

The nexus between terrorism and videogames is an important yet relatively understudied topic. Popular discourses and media framings frequently draw explicit links between incidents of terrorism and violent games. In August 2019, for example, the US President Donald Trump directly implicated violent videogames as a cause of mass shootings in El Paso, Texas and Dayton, Ohio.¹ At the same time, we can identify a number of significant moves by extremist organisations to exploit the popularity of gaming by either making games (e.g. Hezbollah's production of Special Force (2003) and Special Force 2 (2007)) or through the use of gaming-based imagery in terrorist propaganda (e.g. IS Sympathisers' production of the popular meme "This is our Call of Duty and we Respawn in Jannah" which reappropriated and explicitly referenced the market-leading *Call of Duty* series).² This is hardly surprising – the videogames industry is the world's largest popular culture sector by monetary value, is the fastest growing of all popular cultural industries,³ and has become truly mainstream over recent decades. In the USA, for example, it is estimated that as of 2018, 64% of American households play games; of those who play, 67% are men and 33% women, with an average age of 34.4 It therefore "makes sense" for extremist and terrorist organisations to use games and gaming-based iconography as an integral part of their propaganda activities. Furthermore, given that videogames are increasingly distributed on the internet, that gaming is synonymous with online community building and that games are interactive and highly engaging, there are also clear reasons to see videogames as instinctively appealing to extremist and terrorist groups who seek to attract would-be recruits.

Yet perhaps surprisingly there has been a decline in recent years in the number of videogames produced by such groups. As Mirion Lakomy and Andrew Selepak identify in separate studies of Islamist terrorists and white supremacists respectively, there were perhaps a dozen high-profile games produced by jihadi groups and white supremacist groups in the early-mid 2000s – a trend which the Anti-Defamation League described in 2004 as "a deeply troubling development." Yet as we reflect on the situation at the time of writing (in 2020), their use by extremists appears to be on the wane, with fewer groups making such games. Lakomy offers four explanations as to why this is the case that seemingly holds equally for far-right games too. First, sympathisers lack the required skills and resources to develop high-quality games. Second, modifying existing games is less time consuming. Third, groups and sympathisers aim to create more "digestible" content for their large audiences and, finally,

mods provide a medium to combine amusement with propaganda, as well as being a tool that enables audio-visual records, such as trailers.⁶

Given this apparent decline, we might ask why it is still worthwhile to study extremist and terrorist videogames. There are (at least) three reasons for further research in this field. First, even though officially sanctioned videogames may be on the wane, both white supremacist and jihadi groups are still closely associated with games and gamification, with contemporary campaigns demonstrating moves towards social media propaganda that appropriate mainstream popular cultural iconography, including those derived from western-made videogames such as the *Grand Theft Auto* and *Call of Duty* series. Second, as Lakomy suggests, videogames remain important given the proliferation of "mods" to mainstream games created by terrorist sympathisers, with mods – in which an existing game is altered by changing aspects like audio-visual components or gameplay – such as those to the game *ARMA3* enabling players to play videogames from the position of a terrorist. Third, beyond the shifting nature of the gamification of violent extremism, there is a need to deepen our present understanding of the nexus between games and extremism, which remains relatively limited.

In this article, we address the relationship between gaming and terrorism and make two interrelated arguments that aim to develop current understanding. In the first, we note that current research tends to frame terrorist videogames primarily as tools of recruitment, which reflects a broader trend within terrorism studies. We argue that a more nuanced approach is needed with respect to the intended audience. The corpus of extremist and terrorist video games is not, by and large, intended to recruit "normal" individuals to a movement by radicalising them. Rather, the purpose of such games as propaganda is to reinforce and normalise the beliefs and motivations of those already in the movement. The games contain iconography and specialist knowledge that is clearly intended for audiences that are already invested in the underlying ideology. Second, we point to the importance of interactivity in videogames; much of the existing literature on terrorists' use of videogames focuses on the content but neglects the ways in which interactivity – which is integral to gameplay – can help communicate the messages of their creators. To show this, we reflect on three themes which are integral to the interplay between interactivity and propaganda: we highlight insights from work such as that by Ian Bogost, which explores how interactivity is integral to the persuasive nature of games'; we reflect on the role that players perform as "player

subjects" in framing the meaning that extremist and terrorist games offer through interpretation of their sound, visuals, narratives, and interactive gameplay; and we identify the need for games to strike the right balance between challenging and engaging gameplay so as to draw in, rather than put off, a would-be terrorist sympathiser from the world of the game. These two arguments are interrelated: both look beyond superficial understandings of the audience as a homogenous receiver that can be influenced by persuasive messages. Rather, they highlight that a number of different audiences are targeted and may be affected in a number of different ways.

While both of these arguments are made here with relation to video games, this topic offers a lens to better understand terrorist propaganda and communication more broadly. In a 2017 special issue of *Studies in Conflict and Terrorism*, Maura Conway offered six suggestions to progress research into violent extremism online: "widening" beyond jihadism; "comparing" across groups, countries, and languages; "deepening" the body of research by focusing on newer questions and methodologies; "upscaling" with big data; "outreaching" to other disciplines, and increasing the focus on "gender". In Part 1, we "deepen" and "widen" our present understanding of content by focusing on the producers of content and probing their objectives for creating terrorist video games, while in Part 2, we engage in "outreach" by drawing from a rich body of literature within game studies on the importance of interactivity. The arguments offered in both parts can inform research into violent extremist communications where the overarching understanding is still that propaganda is created and disseminated to radicalise and recruit individuals to a movement, and there is little attention paid to interaction with terrorist content, despite the fact that the most popular social media platforms are highly interactive.

Part 1: What is the Purpose of an Extremist Game?

Although the definition of propaganda is the subject of much academic debate,⁹ there is consensus that it is a form of communication aimed at influencing the opinions and/or behaviour of its target audience towards some kind of end goal: political, social, or military. It can be deployed for a number of different purposes and targeted towards different audiences. However, the study of extremist and terrorist propaganda has often focused on propaganda for recruitment's sake. This is particularly true when it comes to extremist and terrorist video games; discussions often centre on the possibility of "normal" individuals

becoming involved within an extremist movement as a result of playing such games. Although games may serve some recruitment function, we argue that much can be learned if they are also understood as a means of reinforcing the beliefs and motivations of those already involved in the movement. To do this, we "deepen" the current understanding of terrorist video games by linking analyses of the content of the videogames and their producers. We do this by drawing upon arguments by propaganda theorists and terrorism studies scholars, whose framing of the purpose of propaganda provides an important lens with which to view extremist video games. Furthermore, we draw a distinction between certain videogames' official motivations and those made by sympathisers or hobbyists, considering how this may affect understandings of the reasons and aims for creating such games.

The Purpose of Propaganda

The academic study of propaganda has changed substantially over the last 100 years. After the First World War, the widespread use of methods designed to alter public opinion created fears that these may be used maliciously to manipulate the public. ¹⁰ Jordan Kiper notes that legal discussions surrounding both the Holocaust and the Rwandan genocide both spoke of propagandists "infecting" the minds of whole populations to undertake some of the worst atrocities known to man. He argues that this line of thinking embraces the "hypodermic needle" theory of mass persuasion, in which whole societies are treated as passive receivers of information shaped by message designers. ¹¹ Kiper demonstrates that this is a simplistic understanding that overlooks the complex social dynamics, such as appeals to existing ethnic tensions, which framed murder as citizens' duty. ¹² The understanding of propaganda as a tool that can dramatically alter attitudes and implant new ideas is long outdated within communications theory. ¹³

Propaganda can be deployed for a multitude of reasons and there is a vast literature discussing different tactics and strategies. Central to our argument is that it is rarely intended as a means of recruiting individuals to a group or movement that are not already ideologically aligned to the cause. One of the most renowned scholars of propaganda, Jacques Ellul, argues that propaganda is not an effective method of introducing new ideas to their target audience but instead works by drawing upon their existing biases:

Existing opinion is not to be contradicted, but utilized. Each individual harbors a large number of stereotypes and established tendencies; from this arsenal the propagandist must select those easiest to mobilise, those which will give the greatest strength to the action he wants to precipitate. ¹⁴

For Ellul, the aim of modern propaganda is not to modify ideas, but to provoke action by those that already believe: "it is no longer to lead to a choice, but to loosen the reflexes". ¹⁵ Similar thinking can also be found in Nicholas O'Shaughnessy's work on political propaganda. As with Ellul, he does not believe that propaganda can be effectively used to change individuals' core values:

rather it attempts to conscript them. Every advocate knows that values are almost impossible to alter overnight, they move slowly over time as a result of exposure to rival arguments and mature reflection ... Propaganda seeks only to interpret those values to yield different value judgements.¹⁶

O'Shaughnessy argues that for propaganda to work it needs to preach to the already converted that can, in turn, stimulate individuals into the desired action.¹⁷

It is common for discussions of terrorism and extremism to look at propaganda in a relatively one-dimensional manner. Discussions tend to focus on propaganda as a tool of recruitment, or as facilitating the nebulous process of "radicalisation". Take, for example, a 2018 Europol report's discussion of IS in the Western Balkans, which suggests that the group's propaganda "activities were aimed at the radicalisation and recruitment of new members for terrorist organisations." Similarly, the UK Government's *Online Harms White Paper* warns that: "The threat continues to evolve with terrorists' relentless desire to seek out new ways to share their propaganda in an effort to radicalise and recruit." The European Parliament goes further, noting that terrorists "misuse the internet to groom and recruit supporters ... [the] availability of online terrorist content can accelerate radicalisation, recruit terrorist supporters and facilitate or instruct terrorist activity." While the door is left open in all of these examples for other purposes for propaganda, the underlying assumption is that the primary goal is to "infect" the mind of individuals to join the movement.

A number of scholars have cautioned against this thinking within terrorism studies. Marc Sageman notes that one of the problematic elements of contemporary terrorism research is that "there is an implicit assumption that mere exposure to material on jihadi websites radicalizes naïve Muslims and turns them violent."²¹ That is to say, research tends to assume that propaganda can, and may be designed to, turn "normal" people into terrorists. Anne Aly, concurring with Sageman, notes that there is a lack of empirical evidence for this assumption, which is tantamount to a "hypodermic needle" understanding of propaganda.²² Cristina Archetti also highlights this problem, noting that much blame is put on the Internet for its ability to transmit content that "radicalizes" individuals, a perspective which treats propaganda as so persuasive that engagement with it will change attitudes and behaviour.²³ Problematically, terrorism studies has been noted as having a heavy focus towards analysis of content rather than the behaviours of terrorist actors - particularly in the online domain creating a causal knowledge gap as to how content actually affects audiences.²⁴ There is a wealth of literature analysing propaganda, but little focus on either the producers of such content or the intended audience.²⁵ This imbalance leads towards viewing content as persuasive, regardless of whether there is evidence to support this claim. As we show in Part 2, there are similar, problematic, assumptions made in much of the literature on videogames. In particular, much work on games and violence assumes that the interactive quality of games almost automatically poses dangers and harms to players.

We of course acknowledge that there is research within terrorism studies that takes a more nuanced approach to producers' intentions. Charlie Winter draws on Ellul's framework while analysing a corpus of Islamic State propaganda, rejecting the conventional wisdom that the group's propaganda is limited to the task of recruiting new supporters and suggesting that the picture is far more multifaceted.²⁶ Winter suggests that the group's propaganda should be seen as an entire ecosystem of information, with a wide array of different ends and means. And he reiterates Ellul's argument that propaganda is not an effective tool for implanting new ideas - i.e. the naïve examples of "radicalizing" or recruiting a "normal" person into terrorism – but that it can be immensely effective at compounding and crystallizing alreadyheld beliefs.²⁷ Winter's findings show that the vast majority of Islamic State's communications make no call to action and sanction particular behaviours. Rather, they provide news updates as to the goings on within the 'caliphate,' targeted at those that are already ideologically committed to the movement: "for the Islamic State, propaganda was never just a way to recruit new supporters. Instead it was instrumental to the jihad itself."28 We contend that this more nuanced understanding of propaganda can provide a better explanation of the production and deployment of extremist video games.

This line of thinking can also be seen in the research of J.M. Berger, particularly in his analysis of the dystopian white supremacist novel *The Turner Diaries* (1978). The book was written by William Luther Pierce, who was cognisant of the most effective ways to recruit new members to the movement, as demonstrated by his rejection of the overt American Nazi Party when he founded the more subtle National Alliance; he considered the former to be offputting to the general population.²⁹ Despite this, *The Turner Diaries* does not seek to recruit new members by persuading them of the movement's core arguments.³⁰ Instead, Pierce assumes that the reader already subscribes to the movement's ideology: "Part of Turner's unique impact derives from its assumption that its readers have already made an identity choice, and that this identity choice is primarily 'white.'"³¹ Pierce deliberately makes no attempt to motivate readers to racist behaviours through moderate language; rather the book seeks to persuade readers that violence is the rational choice because of the oncoming race war. This strategy limits the size of the readership, focusing instead on maximising the impact "of potential racist extremists to include the adherents of any white nationalist faction, as well as pedestrian racists who identify simply as 'white." Setting out a five-step process through which individuals move from first engagement with ideology to the ultimate decision to act out violence, Berger notes that:

The Turner Diaries assumes that readers have either gone through these steps already or do not otherwise require them. The book's argument is instead focused on the penultimate stage in radicalisation to violent extremism – self-critique.³³

In other words, Pierce's intended audience is not moderate individuals, nor curious ones, but those that have fully accepted the movement's underlying ideology. Similar to Winter's analysis, *The Turner Diaries* aims to crystallize existing attitudes.

Extremist Video Games as Recruitment Tools

As with much of the existing research on extremist and terrorist propaganda, the small body of research on the production and dissemination of extremist video games is also heavily focused on recruitment. In his discussion of the history of jihadist video games, Lakomy states that one of his three goals is to "identify major patterns and trends in using this type of computer program to inspire, radicalize, recruit, and intimidate jihadis' respective audiences."³⁴ For this he focuses specifically on *Special Force* (2003), which was produced by Hezbollah's Central Intelligence Bureau, discussing the five countries in which it was

published and the four languages in which it was released. *Special Force* and its sequel *Special Force 2: Tale of a Truthful Pledge* (2007) are first person shooter games that replicate the feel and form of most Western games in the genre.³⁵ Both games are explicitly militaristic in tone, placing the player in the role of a Hezbollah operative fighting during the conflicts between Israel and Lebanon in the early 1980s and 2006. Crucially, Lakomy quotes a Hezbollah representative who claims that the game was intended to introduce the youth to "the resistance", so emphasising its framing as a tool for recruitment.

Gabriel Weimann also draws on the theme of recruitment in his discussion of video games. Focusing on games created by or for al Qaeda affiliates, he notes that "Some terrorist organizations have designed online video games to be used as recruitment and training tools...For example, [al Qaeda in the Islamic Maghreb (AQIM)] is changing its strategy to target children at an early age to lure them to its radical ideology." The game in question, *Muslim Mali* (2013), which involved the player piloting an aircraft fighting for AQIM against French jets, was ridiculed for being technologically primitive, easy to win, and having ideological contradictions. Weimann argues that children are most likely to be drawn to such games and that they have the potential to play an important role in the radicalisation and ultimate recruitment to such groups from an early age.

More recently, in discussing the Islamic State's use of *Call of Duty* motifs in its propaganda, Cori Dauber and others note that the target audience are "in the exact sweet spot in terms of recruitment ... young, male, and technologically savvy." One example of this motif is the well-known Internet meme depicting two jihadists with bright spots covering their faces and the group's black standard flag in the top right hand corner. One is holding an AK47 rifle and making the *tawheed* gesture, with the text "THIS IS OUR CALL OF DUTY, AND WE RESPAWN IN JANNAH." Dauber and others argue that videogames, and the culture that surrounds them, are an important aspect of the group's recruitment because they tap into what they call the global youth demographic. Scholars have also noted that IS have utilised shots in their video propaganda that appropriate video game styles and have even used footage from *Call of Duty*, suggesting that the group may be trying to attract this market. Ahmed Al-Rawi also highlights the importance of game motifs in his discussion of a YouTube clip of a video game trailer for *Salil al-Sawarim* (The Clanging of the Swords), which is modified from *Grand Theft Auto*, suggesting that the cultural "coolness" can facilitate recruitment to the Islamic State (although it is not clear that the game itself was ever released). In Part 2,

we explore similar concerns in regard to the susceptibility of youth to harm from interactive videogames, particularly violent games.

Discussion of far-right videogames has also followed the theme of recruitment. The bestknown game is Ethnic Cleansing (2002), created by the neo-Nazi organisation National Alliance and their sister music record label Resistance Records. The game is a first-person shooter in which the user can choose to play as a white-robed and hooded Ku Klux Klansman or neo-Nazi skinhead as they shoot different minorities to a background of white supremacist rock music.⁴³ A report for the Anti-Defamation League on the release of *Ethnic Cleansing* noted that the development of such games "as a source of revenue and recruitment... [was a] deeply troubling development."44 Similarly, Paul Bolin and Doug Blandy argue that "the creators ... engage players through inflammatory rhetoric and heinous stereotypes, and the game is reportedly being used by 'Hate' groups to recruit new members."⁴⁵ Discussing the whole body of far-right video games, C. Richard King and David Leonard apply a lens of recruitment too: "Games are threats but also tools of recruitment, a means to educate and create a community, all in getting ready for the inevitable race war."46 As with the jihadist games, the underlying theme is that extremist organisations seek to cast the net wide, making use of video games and the surrounding popular culture to tap into a pool of uninitiated gamers who have the potential to become future members of their organisations.

Preaching to the Converted

We do not dispute that extremist video games may have a recruitment function for their organisations. However, we argue that the perspectives offered above by Ellul, O'Shaughnessy, Winter, and Berger can provide a useful frame through which to view these games. They are largely not designed to change the minds of moderate individuals and recruit them into the movement; rather, they are better understood as a means of communicating with individuals that have already adopted the underlying ideology as a fundamental part of their identity. The corpus of far-right games, for example, makes no effort to persuade the player that the racism inherent in the game is correct: it is assumed and embedded into the gameplay. The purpose of *Ethnic Cleansing*, for example, "is to kill 'sub-humans' – i.e. blacks and Latinos – and their 'masters,' the Jews, who are portrayed as the personification of evil." The minorities are subject to the tropes and racial caricatures that are part of the white supremacist movement, including monkey noises, shouts of "Ay Caramba", and "Jewish overlords" that live in the sewers beneath the city. Similarly, *ZOG's Nightmare* (2006) and

its sequel *ZOG's Nightmare II* (2007), first-person shooters produced by the National Socialist Movement, both draw heavily on Nazi iconography including swastikas and pictures of Hitler, with similar extremist caricatures of the Jewish "enemy".⁴⁹ Such imagery was typical of the group, who were infamous for holding rallies across America in full Nazi uniform including swastika armbands.⁵⁰ Just as Berger describes with *The Turner Diaries*, there is no attempt at persuasion towards racism within these games; instead they offer an outlet for those who have no qualms about killing people portrayed through such extreme racist caricatures within the game, or those not immediately appalled by the celebratory use of Nazi iconography.

Importantly, these games also contain information and symbols that require a degree of specialist knowledge to identify; for the player to already be part of the in-group. When playing *Ethnic Cleansing*, the symbol of its creator organisation – National Alliance – takes on particular in-game significance as by passing through it, the player regains health. The symbol is a Nordic cross with the two sides slightly upturned, but is not accompanied by the name of the organisation.⁵¹ It is simply assumed that players understand the importance of the symbol, emphasised by its role within the game. The game also contains an Easter Egg - aterm for a hidden object that can be found within the game – of a video clip of the then National Alliance chairman William Pierce (author of *The Turner Diaries*) promoting the upcoming white revolution.⁵² Pierce is not introduced, nor is his name given; the audience is assumed to know his identity.⁵³ Even the name of the ZOG's Nightmare games, which refers to an anti-Semitic conspiracy theory – Zionist Occupied Government⁵⁴ – is not explained in either the title or description of the website where the game can be purchased;⁵⁵ the intended audience is assumed to have familiarity with the acronym. Although anti-Semitic conspiracy theories have been relatively mainstream in both American and European culture over the last century, this specific acronym is not popular enough to be understood by moderate individuals, but instead would only be known to people who have already accepted white supremacist ideologies as part of their identity. These factors all suggest that these games are created first and foremost for the purpose of spreading and reinforcing ideas for those who are already active within – and knowledgeable about – the movement and its symbols, and are not put off by overt racism.

Although the creators of the *Special Force* games do, as Lakomy notes, emphasise a recruitment perspective by introducing the next generation to the "the resistance", there are

also elements of the same types of inter-textuality as described in the far-right games. In lieu of the game's end credits, images of Hizbollah's "martyrs" are shown on the final screen, and the game contains a "training mode" that allows players to shoot at pictures of then Israeli Prime Minister Ariel Sharon and other military leaders. ⁵⁶ When playing the game, the player must shoot Israeli soldiers - made clearly identifiable via large Stars of David on their uniform. ⁵⁷ As with the far-right games, the *Special Force* games do not seek to persuade players that joining "the resistance" against Israel is a good idea, but instead assume that the player has already adopted that ideology, and will have no qualms about shooting Israeli soldiers and their leaders within the game. Following Ellul's analysis, the game does not seek to implant new ideas of Israel as the identified out-group that is responsible for the extremist group's grievances, but instead assumes this is already understood by the audience: it draws upon these stereotypes to motivate such players to action.

These arguments are reinforced by a consideration of the ways in which these games can be discovered and accessed. In his study of a body of far-right games, Selepak considers whether recruitment is the primary motive of the game designers, such as white supremacist groups National Alliance and the National Socialist Movement. He argues that the fact that most extremist videogames were found on white power music websites suggests that "the games are marketed more to current members of extremist groups as a means to reinforce white supremacist ideology rather than simply as a means to recruit new members." The respective music labels of the two groups – *Resistance Records* (now ceased operations) and *NSM88 Records* – both sold the game, and songs from each label can be heard as a backdrop to each game. Thus, aside from the furore upon their release from anti-racist groups such as the Anti-Defamation League, the only people that would likely be aware of their existence are those already within the movement.

To be clear, we are not arguing that video games are created with one, single, purpose in mind: it is possible that gamers may find enjoyment in such content without being at the more extreme end of the spectrum. Game designers can seek to appeal to multiple audiences from the curious to the ideologically embedded. First, there is evidence that some players are engaging with these games on the basis that they are "simply enjoying" playing first person shooter games and/or engaging with them for critical intent. Many of the "Let's Plays" of these games available online – videos of users playing a game that is uploaded to social media – take the form of critical evaluations by "gamers" rather than by sympathisers.⁵⁹

Second, and at a deeper level, designers may hope that some players who play these games and "enjoy" killing minorities or Jewish people are intrigued by the symbolism and intertextuality, so subsequently actively search for more information around the movement. Here the game could potentially serve a recruitment function for those outside the movement. Third, such games could appeal to those that accept their ideological basis, but are currently on the periphery of, rather than being part of, a formal group. Such games could also serve to appeal to those who are part of a different group with similar ideologies, helping to outbid rivals: David Machin and Usama Suleiman note that Hezbollah's early 2000s media activity, including the release of Special Force, lionised the group "in the Arab world as a model of resistance to the new Western colonialism."60 Such successes could be deemed recruitment from within the movement. Finally, there are those that are fully committed to the movement and are knowledgeable of the sub-texts, important figures and symbols. Doubtless, every game designer wishes for their game to be played as widely as possible; however, given the inter-relationality and inter-textuality explored above, combined with the marketing of these games in corners of the Internet that only white supremacists inhabit, we suggest that the most likely targets are the final two groups. However, additional research is urgently needed to explore actively the motives of the designers of extremist games, to study those who actually play them, and to gain deeper understanding of what this audience "gains" from playing extremist and terrorist made videogames.

Finally, an important consideration when discussing whether video games serve a recruitment function is establishing whether the extremist groups actually created or sanctioned the games. For some, such as the *Special Force* games, *Ethnic Cleansing* and its sequel *White Law* (2003), and the *ZOG's Nightmare* games, this is easy – the groups explicitly market the games. However, for many of the jihadist games, it is far less clear whether the groups made or authorised them. In his discussion of jihadist games, Lakomy notes that: "Only a few programs were developed by [violent extremist organisations] themselves. The majority of the [games] were just mere modifications, which were either hijacked from hobbyists ... or were created independently based on ripped-off commercial products." Similarly, Al-Rawi notes that the YouTube trailer for the supposed IS video game adapted from *Grand Theft Auto 5* could not have been made by any of the organisation's media arms, because "the group stands against entertainment activities like listening to music or playing games that can divert attention from prayer and faith." Unofficial propaganda is not exclusive to video games; part of the success of IS' virtual caliphate was driven by unofficial memes and gifs

that took a more pop culture approach than IS' official output.⁶³ However, this activity raises an interesting and unanswered question as to the purpose and implications of these games' creation. Rather than viewing such games as a tool for recruitment of new members, it is also possible they are created for the purpose of peer-to-peer socialisation within a jihadist community, sometimes described as "jihadi cool."⁶⁴ On this reading, the target audience of the propaganda is again individuals that have already adopted the core ideology of the movement, rather than attempting to engage with the uninitiated.

This section has sought to heed Conway's call to "widen" beyond the present narrow focus on jihadi content; to "compare" by thinking about extremist games in all their forms, and to "deepen" our understanding of extremist videogames by drawing a link between the content and its producers, questioning their purpose. So far, studies of terrorist videogames have tended to focus on recruitment in a narrow sense. However, we believe that offering a more nuanced perspective that considers multiple audiences and objectives is more fruitful. We argue that for a number of games the primary purpose has not been to recruit new members, but rather to reinforce and normalise the ideological belief system of the already converted. Although we acknowledge that designers of extremist and terrorist games are likely to be targeting a variety of audiences, including potential recruits, we suggest that these games have the potential to motivate significant responses beyond recruitment.

Part 2: Deepening our Understanding of Content: Bringing interactivity to the fore

In Part 2 we turn to what Conway terms "outreach" (learning from other disciplines) to argue that the existing literature on terrorism and videogames understates the central role that interactive gameplay plays in the potential for propaganda and strategic communication that videogames offer to extremist organisations. This existing work – much of which is of very high quality – largely develops and operationalises methods for reading content: identifying visual tropes, setting out the significance of sound and music, and showing, for example, how terrorist groups have used videogames and/or intertextual appropriations of videogaming-based iconography within their social media campaigns as part of their strategic communication. However, it fails to take sufficient account of the central role that interactivity – which is integral to gameplay – has in terms of the ways in which games can communicate their messages.

For example, Selepak's exploration of violent racist games offers a reading of 28 such games in which he examines who the enemies of the player were, what role the player played in the game (that is, who were the "heroes" of the game), the quality of the graphics within the game, and how prevalent violence was within gameplay.⁶⁵ His analysis demonstrates that these games are extremely racist, typically providing players with a portrait of a white hero who is involved in murdering people of colour, albeit with crude graphics. Lakomy similarly explores the production of jihadi-sympathising videogames and game-based iconography: offering, for example, a detailed demonstration of the parallels between Islamic State videos and a series of videos hosted by Jihadi Mark on YouTube in which scenes are replayed within the game *ARMA 3*, filmed with game capture software, and then posted as "Let's Play" videos.⁶⁶

Thus, while there is a significant body of valuable literature that explores extremist and terrorist social media and videogame content, much of it focuses explicitly on what is seen (exploring the identity of the player, the way that the "enemies" are portrayed, or the in-game iconography) and heard (through discussion of sound effects, types of music etc.) to demonstrate the parallels with group ideologies. Little of it analyzes what that terrorist content enables gamers to do. In other words, the existing literature fails to adequately explore the importance of interactivity, which is crucial to videogames. This tendency to focus exclusively on visual representations is not unique to terrorism studies, and is in fact reflective of a widespread tendency in the literature on games in general. Researchers in areas such as games and gender, games and race, and games and violence frequently similarly privilege examining what is seen rather than focusing on gameplay.⁶⁷ Responding to Conway's call for "outreach" (or learning from allied disciplines), we argue that much could be learned about why extremist content is arresting and engaging to users from the existing literature on interactivity from within game studies.

At a fundamental level, what differentiates games from other media such as film is the central role that interactivity plays. Games, as Frans Mäyrä puts it, "are interactive by heart". ⁶⁸ In considering the importance of interactivity and gameplay for understanding the nexus between terrorism and videogames, we develop a framework based on three important and interrelated themes. First, we emphasise the potential for games to utilise interactivity to create what Bogost terms "persuasive games"; second, we highlight the relationship between

interactivity and the role that players perform as "player subjects" in framing the meaning that terrorist games offer through their own interpretation of sound, visuals, narratives, and interactive gameplay, and finally, we explore the need for games to strike the right balance in their use of such interactive gameplay to provide engaging yet challenging game experiences — what Jesper Juul terms "the art of failure".⁶⁹

Videogames and Persuasion

As Bogost argues, videogames in general have important persuasive potential, ⁷⁰ derived from the rules that are coded into the game, which both enable the player to undertake certain actions and also prevent them from doing certain things: "These rules do not merely create the experience of play –they also construct the meaning of the game." The value of Bogost's work on persuasive games stems, in part, from his emphasis on "procedurality", which refers to a combination of "procedure as rules or process" – such as the rules and laws that citizens confront in their everyday lives – and the structures imposed by computers due to their reliance on algorithmic language. ⁷² An exploration of procedurality enables insight into the conscious decisions taken to code certain possibilities into and out of the game, such that the game can create "representations of the ordinary world that might give players new perspectives on the world that they inhabit." Games take on their persuasive potential through the centrality of what Bogost terms "procedural rhetoric" – which refers to the way in which games combine visuals, sound, narrative, and actions, albeit with a primary focus on the power of actions (processes) that the player can undertake: the "practice of using processes persuasively."

Thus, according to Bogost, games allow spaces for the exploration of rules through a process of experimentation (the possibility space) and can be used as metaphors to explore the rules that underpin society as a whole (procedurality), often in ways that are highly critical, yet expressive (procedural rhetoric). It is through this combination of possibility and process – reflected in the actual experience of the player – that games attain their persuasive power and become instrumental to social critique and reflective learning. As Mary Flanagan argues, "[g]ames are frameworks that designers can use to model the complexity of the problems that face the world and to make them easier for the players to comprehend. By creating a simulated environment, the player is able to step away and think critically about those problems."⁷⁵

This work on procedural rhetoric has extremely important implications for how we understand and analyse extremists and terrorists' use of videogames. First, in terms of decoding the procedural rhetoric of such videogames, the fact that many of them utilise gameplay dynamics that rely on shooting and destroying enemies suggests that the messages the games convey (and hence that the extremist or terrorist group also supports) are that the groups' aims can/should be achieved through violence. The absence of games that offer alternatives to violence suggests that these groups see little role for representative democracy, for example, in securing their aims. While not made by a terrorist organisation, the game *Under Ash* released by Syrian developer Dar al-Fikr in 2003 explores the intifada from the Palestinian standpoint, so offering a different perspective to that offered by many conventional first-person shooters. As James Paul Gee puts it, the content of the game serves to "involve the player deeply in the Palestinian cause and Palestinian perspectives." Yet "[e]ven *Under Ash* (less obviously militaristic in tone) does not allow or suggest alternative ways in which political accommodation could be reached, for example through the use of a court of law or the promotion of policing."

In addition, it is important to note that the "mods" – those adaptations to existing games, made by supporters of extremist or terrorist groups or movements, which Lakomy identifies as increasingly proliferating – necessarily have to adopt the gameplay mechanics of the original game. Modders are thus forced to work with values derived from those of the original developers: that is, the procedural rhetoric of a modded game is bound by that which is contained within the original game. To take an illustrative example, the modifications that have been made to the game *ARMA3* to allow the player to play as a member of IS/AQ necessarily still rely on gameplay structured by the original game. While the changes serve to shift the positionality of the player, enabling them to embody a group that was absent from the original game – and in so doing, also allows the player to shoot and destroy those from "the West" that the original game frames as heroes – it still uses gameplay mechanics from the original. The extent to which a mod thus serves to promote the strategic communication aims of a terrorist or extremist group is thus directly linked to whether the procedural rhetoric that the mod offers is aligned or in tune with the propaganda aims of the group concerned.

Thus, from the point of view of a terrorist or extremist group, whether the game is made by them or derived from a mod, it can still prove to be of real value to their strategic communication, but only if its procedural rhetoric is attuned to the group's ideology.

Assuming this is so, a mod can potentially offer what Alexander Galloway terms a realist perspective to the player. For Galloway, a "realist game" is one which is embedded in social and political struggle and in which the relationship between the player and the game is crucial. As Galloway argues, "fidelity of context is key for realism in gaming." Central to this is an understanding of the relationship between the message of the game and the perspective of the player. As Galloway argues, for a Palestinian living under Israeli occupation a game such as *Special Force* could be seen as a counterpoint to a dominant ideology that supports Israel's control over the West Bank, yet, for an Israeli citizen, such a game will likely be seen as illegitimate, promoting terrorism. A mod can similarly, therefore, offer what Galloway terms a realist perspective to the player by enabling different positions for the player through gameplay – illustrated, for example, by the modification to the game *ARMA3* which allows the player to play as either IS or AQ. The strategic value/potential of both games and mods to an extremist or terrorist group is clear: they can offer a space for terrorist sympathisers to engage in violence, which can serve to bolster their central message, particularly if violence is central to their aims or strategies.

Whilst this is a complex issue – one person's terrorist is another person's freedom fighter, to paraphrase a common dictum – to most audiences, terrorist games would conform to what Miguel Sicart terms "unethical content", by which he refers "to the simulation of actions that outside the simulated game world we deem ethically despicable." The content is unethical due to it being excessively gratuitous (e.g. graphic images and representations) and/or due to it allowing interactions within the game which are "simulations of unethical acts." Crucially players are rewarded in an unethical game for undertaking unethical acts – the game either requires such acts for the story to proceed, or gives in-game rewards for immoral actions. It is important to emphasise that in Sicart's reasoning it is not just terrorists who make "unethical games"; mainstream western games, such as those that reward players for undertaking gratuitous violence, are also potentially problematic. 83

Terrorist Videogames and Players

The second element highlighted by our framework for considering the implications of games for terrorist strategic communication, propaganda and potential recruitment is the importance of understanding the central role of the relationship between such games and their players. A common concern in much of the literature is that players will be disproportionately susceptible to videogame content because of its interactive qualities. Reflective of the

"hypodermic needle" accounts of terrorist content and recruitment, which we problematised in Part 1, there remains a very strong tradition in studies of games of seeing players as similarly affected by games. In particular, much of the work on videogames and violence offers what Simon Egenfeldt-Neilsen *et al.* term an active media perspective which "believes that media actively influence a mostly passive recipient, the player." We share Sicart's desire to problematise such assumptions and place a strong store on player agency. For Sicart, even if a game persuaded a player, "there would still be large ethical steps between being persuaded by a game and being morally affected, due to the players' ethical capacities for reflection in context."

What is central to Sicart's overall argument is the placing of the player centrally into the analysis – it is not the content per se that has affects/effects, because the player can be assumed to retain the faculties to understand the game as "just a game". The player is "a player-subject" who is "an operative moral being who interprets her acts within the game from an ethical perspective." Two key claims emerge here which are central to our argument. First, that while games are unique in terms of their interactivity, experienced mature players *do* understand them as systems in which their actions are *part of the game* rather than a representation of real-life. Thus in-game violence, for example, is understood as a necessity for success within a game and not as a lesson about what is required to succeed in "real life". Second, players retain independent thought and judgement and bring their critical faculties into their engagement with games. They are not brainwashed by their engagement with games, but are thinking "player subjects", exercising a particular type of subjectivity when they play games, which has minimal implications for their broader subjectivity.

That does not mean, however, that we should not be concerned about the content of extremist and terrorist videogames and their effects on players, as the implications of unethical content are highly contingent on the player. Assuming a game should not be banned outright due to inciting hate or breaking other ethical mores, we follow Sicart in arguing that only players who are of sufficient age (i.e. adults) and have what Sicart terms "ludic maturity" (i.e. are experienced gamers who come to see a violent/terrorist game as *just* a game) should be able to engage with unethical content:

To become players is not only a synchronic process of subjectivization that takes place when experiencing a game, but is also a diachronic process by which players create their history and culture in the time spent playing games. Player-subjectivity is who we are and how we morally relate to things when experiencing a game, but it is also who we have been in our ludic experience history. The unethical content of games has to be related to the moral maturity of the player as an interpreter of her actions within the game experience.⁸⁷

Such an argument has implications beyond the consideration of extremist and terrorist usage of videogames and is important for broader debates about media effects, particularly in relation to violent videogames. From this perspective, the dominant research on media effects – largely situated within the field of psychology – places excessive focus on the media, which is frequently "experienced" in experiments in non-interactive ways. The results of the experiments on media users thus fail to engage with violent videogames as gaming *systems*; in doing so they also fail to appreciate that players are engaging with them as "player subjects" with strong understanding that the violence is integral to the specific requirements of the game. Thus, the research on violent content – and relatedly on the nexus between terrorist videogames and players – needs much more active engagement with players to gain greater understanding of how they understand in-game violence as a contingent form of violence that is specific to the requirements of a game. Players "should not be treated as moral zombies, for they do actually behave ethically in the context of playing computer games." So

Work that actively seeks to engage with players in relation to unethical content is thus important for a consideration of terrorist games for several inter-related reasons. First, it makes it clear that games are not the "real world". Second, it emphasises that players retain important critical faculties. Yet serious ethical and moral implications stem from Sicart's work. While there is optimism that players are unaffected by unethical games as they are thinking beings, it is clear that for this to be the case, players need maturity and understanding of games as systems in order to have the critical capacities to assert ethical agency with regard to unethical content. Given that much of extremist and terrorist groups' usage of videogames may be precisely targeted either at children and teens or at those who are inexperienced gamers – albeit they may be versed in a terrorist group's messages – this does suggest that many could well be affected by videogames.

Having said this, the third element of our framework – the recognition that effective and engaging games must hit a "sweet spot" between empowering and disempowering the player through interactivity – must be taken into consideration in any claim about such potential affects. This "art of failure", in Juul's terms, suggests that a player will derive pleasure from a game that provides a satisfying degree of challenge: an excessively difficult game will lead to frustration, will disempower the player, and may push them away from playing, whereas an excessively easy game may lead to boredom, and a lack of fulfilment on the player's part. The "art" to which Juul refers describes the creative process, which results in the successful design of a game system that delivers satisfaction to the player.

Juul's insights into failure and its artistic underpinnings have important implications for understanding interactivity when considered alongside Csikszentmihalyi's widely cited discussion of "flow". 90 In particular, flow describes the position in which the player can remain immersed in the game, challenged enough to retain focus but neither insufficiently nor excessively challenged to break its spell. Insufficient challenge results in boredom; excessive challenge results in a pattern of perennial failure: each experience weakens flow. A welldesigned game, therefore, is one that can "appropriate players' need for leisure and ability to recognize patterns and turn them into experiences that players want to traverse again and again because they find joy in repetition and learning."91 Understanding this "art of failure" would suggest that extremist and terrorist videogames need to use interactivity effectively to provide engaging gameplay to players in order to be effective tools of strategic communication. Games that are lacking in challenge would prove boring to their audiences, whereas those that are too difficult would lead to frustration. Either outcome could serve to actually undermine the propaganda potential and strategic communication aims of a terrorist group – if a player becomes frustrated or bored by such a terrorist game, they may come to associate such emotions with their feelings towards the terrorist group and its aims and messages.

This challenge is accentuated by the fact that a terrorist's "audience" for its strategic communication could vary between already experienced gamers and those who have little experience of (or appetite for) playing games. In the process of writing this article, one of the authors – an experienced gamer of over 30 years standing – engaged with the games *Ethnic Cleansing* and *ZOG's Nightmare*; the experience suggested that these games are designed to appeal primarily to those who are already experienced gamers, limiting their potential as tools

for recruitment. *Ethnic Cleansing* – a relatively short game that can be completed in about 20 minutes – involves a difficult final "boss battle" between the player and an in-game representation of Ariel Sharon in which even experienced players are likely to be killed on a number of occasions. *ZOG's Nightmare* lacks a mini map – making it difficult for the player to locate themselves within the game's narrative action – and while the player has powerful weapons many of the enemies are fast moving and can require approximately 20 bullets before they are killed. Both experiences suggest that these games are designed first and foremost for those who are relatively experienced gamers. We argued in Part 1 that the iconography and messages within these games suggest they are targeted at those who are versed in the groups' aims. Having played these games, their design similarly suggests they are not designed for recruitment of the general population; rather, they are instead targeted at gamers who are predisposed to the groups' messages – an even smaller niche audience.

Overall, then, games can offer highly valuable potential as propaganda for extremist groups. They are both strategically useful (as they are already being widely engaged with by young people) and theoretically valuable (due to their persuasiveness and the potential to code in specific ideologies into the procedural rhetoric of the gameplay) – for both reasons, it makes sense for extremist groups to make use of games. However – and stemming directly from the above analysis – the explanation for why terrorist groups no longer produce videogames as elements of their communication strategy can be seen as resulting from acknowledgement that good game design is not just a question of technical competence, distribution or access to development tools, as Lakomy emphasises. Instead, it also stems from the challenges of designing effective interactive games that prove sufficiently engaging to players and thus successfully deliver the strategic communication aims of a group. Given the wide array of personal histories that those playing such games may have, varying from experienced gamers who are well-versed in a group's message to inexperienced gamers who are ignorant of a group's aims, a key reason that extremist groups have moved into other media forms stems from the challenge with developing effective games underpinned by sound design principles. Thus, a focus on films, printed matter, and social media content such as memes, makes increasing sense as they will not risk alienating would be sympathisers and/or recruits.

In light of the analysis in Part 1, it should of course be reiterated that in spite of their persuasive potential and procedural rhetoric such games are unlikely just to fulfil a "hard" recruitment function, in which game designers seek to "radicalize" those that play. Rather,

they resonate with a range of target audiences with different potential motivations and affects for each of those audiences. The actions of modders who work with existing game tools and/or who speak on behalf of extremist groups are more ambiguous. It may be true that they serve to speak effectively for such groups, but it may also be the case that the messages that are offered by the procedural rhetoric of a mod may inadvertently undermine the groups' strategic communication aims and hence broader interests. A key question for future exploration, therefore, is whether the use of mods helps or hinders the strategic communication aims of a terrorist or extremist group?

Conclusion and Issues for Future Research

This article has set out a call for researchers in the field of extremism, terrorism, internet and social media to look more closely at the role that videogames play in the actions of extremist and terrorist groups. Whilst the making of games by extremist and terrorist groups is in decline, they are still using gaming-based iconography in their propaganda; at the same time there are large numbers of sympathisers who are producing mods to commercially produced games, which explicitly engage with the aims of a wide range of extremist and terrorist groups and organisations. This poses important and ongoing questions for research, for to date the focus has been primarily on official games (i.e. those made, released and distributed by terrorist or extremist groups through their media, social media and internet channels) and very little (if any) work has been undertaken on the mods that sympathisers and supporters are making to mainstream games. Yet the scale and scope of mods outstrips that of official games, posing a number of important questions for researchers. How widely distributed are such mods? Who makes them? Who plays them? How are they viewed by extremist and terrorist groups? Do they support or undermine extremist and terrorist groups' aims?

Part 1 of this article has argued that we need to deepen our understanding of the role that videogames play for extremist and terrorist groups: challenging the present thinking, which largely couches them as forms of recruitment and instead seeing them as tools of propaganda. Whilst we acknowledge that there are some cases in which games have historically been used as tools for recruitment – Hezbollah produced the games *Special Force* and *Special Force* 2 and explicitly promoted them via its media wing as a recruitment tool – these are a small minority. In particular, the limited distribution of extremist and terrorist games and the fact that so many of them use obscure iconography suggests that "official games" are primarily played by those who are already pre-disposed to a group's message. However future research

is needed to interrogate the motives of the producers of extremist and terrorist games, asking questions such as: why have they stopped making games? How important have they been as tools of propaganda? In parallel, we need to ask questions of players such as why do they seek out these games? And what are the implications of their playing them?

Part 2 of this article sought to deepen our present understanding of extremist and terrorist videogames, drawing on insights from the extensive work done in game studies on interactivity. Whilst most of the existing research on terrorist games offers valuable insights into the representations within such games – for example showing who the player embodies, who the enemies are, and providing some acknowledgement of the importance of the in-game symbolism – there is very limited account taken of gameplay. We argue that this is a serious oversight given that an understanding of gameplay is vital to gaining insight into how videogames can serve as a source of interactive, persuasive propaganda. We use Bogost's theory of procedural rhetoric to demonstrate that reflecting on the extent to which such gameplay is aligned and in tune with a group's aims is vital to understand whether or not they offer a successful tool for propaganda/strategic communication. Most games produced by extremists, terrorists, and their sympathisers adopt gameplay that involves the player killing "enemies;" usually those from Israel in the case of Jihadi games and people of colour/Jews in the case of extreme right-wing games. But does the message that extreme violence should be used actually help/aid a group or does it undermine its strategic aims? An appreciation of the role of interactivity matters, in particular, as we seek to gain greater understanding of the importance of mods or games produced by sympathisers, which are not officially sanctioned. Do these mods or games produced by sympathisers, through the gameplay which is coded into the game, in fact promote values that support or undermine a group?

Looking to the future, we suggest that there is also a pressing need for further research on how would-be extremists, terrorists, and their sympathisers engage with one another in more general mainstream game spaces. Given the rapid growth of online gaming and the way in which online games serve to build communities of players who work together in hierarchical and organised groups, based around strong bonds, there are concerns that gamer communities are ripe for the growth of extremism. In the 2019 terrorist attacks in Christchurch and El Paso, both shooters made reference to mainstream first person shooter games. ⁹² Furthermore, gamers have already been implicated in excessive misogyny (as in the gamergate controversy, which began in 2014), and evolving research is beginning to establish that there

are important links between a minority of gamers and extremist sub-groups. 93 The difficulties with monitoring these communities (given the private nature of online gaming communities) suggests the importance of future research in this area.

Games matter – they are arresting, engaging, played by millions and widely distributed. Extremist and terrorist groups may be making fewer games themselves, but they are still making extensive use of popular culture and gaming iconography as an integral part of their messaging. Furthermore, extremist and terrorist sympathisers are still making games and there are numerous mods that engage with extremism and terrorism and present their points of view. The nexus between extremism, terrorism, social media and videogames is thus not a game: it is deadly serious, as this article demonstrates.

¹ Grace Panetta, "Trump Incorrectly Blames 'Gruesome Video Games' and 'Mentally ill Monsters' for Mass Violence While Commenting on 2 Mass Shootings", Business Insider, last modified 5 August 2019., https://www.businessinsider.nl/trump-blames-shootings-video-games-mental-illness-white-supremacy-2019-8/ (September 22 2020).

² On Special Force, see, for example, Helga Tawil Souri, "The Political Battlefield of Pro-Arab Video Games on Palestinian Screens", Comparative Studies of South Asia, Africa and the Middle East 27, no.3 (2007): 536. There are also important examples of videogames produced by extreme right wing groups such as Ethnic Cleansing (2002) and White Law (2003) which were developed and released by Resistance records, itself brought by the extremist group National Alliance in 1999). See, for example, John M. Cotter, "Sounds of Hate: White Power Rock and Roll and the Neo-Nazi Skinhead Subculture," Terrorism and Political Violence 11, no. 2 (1999): 135; Ryan Shaffer, "The Soundtrack of Neo-Fascism: Youth and Music in the National Front," Patterns of Prejudice 47, no. 4-5 (2013): 481. On gaming-based imagery, see, for example, Peter Wignell, Sabine Tan and Kay L. O'Halloran, "Under the Shade of AK47s: A Multimodal Approach to Violent Extremist Recruitment Strategies for Foreign Fighters," Critical Studies on Terrorism 10, no. 3 (2017): 445-6.

³ PWC records global sales of \$2.6bn in 1996, rising to \$18.85bn in 2007 and projected to grow to approx. \$130bn by 2021. Figures derived from PricewaterhouseCoopers, Global Entertainment and Media Outlook: 2008–12 (New York: PricewaterhouseCoopers, 2008); PricewaterhouseCoopers, Global Entertainment and Media Outlook: 2017–21 (New York: PricewaterhouseCoopers, 2017).

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⁵ On videogames and jihadist propaganda see Miron Lakomy, "Let's Play a Video Game: Jihadi Propaganda in the World of Electronic Entertainment," Studies in Conflict & Terrorism 40, no. 4 (2019): 384; on white supremacists' use of videogames see Andrew Selepak, "Skinhead Super Mario Brothers: An Examination of Racist and Violent Games on White Supremacist Web Sites," Journal of Criminal Justice and Popular Culture, 17, no. 1 (2010): 1–47; see also Anti-Defamation League, "Racist Groups Use Computer Gaming To Promote Hate", (2004) Available at: https://www.adl.org/news/article/racist-groups-use-computer-gaming-to-promotehate (accessed September 22 2020): 4.

⁶ Lakomy, "Let's Play a Video Game,": 391.

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⁸ Maura Conway, "Determining the Role of the Internet in Violent Extremism and Terrorism: Six Suggestions for Progressing Research," Studies in Conflict & Terrorism 40, no. 1 (2017): 77-98

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- ¹¹ Jordan Kiper, "Toward an Anthropology of War Propaganda", *Political and Legal Anthropology Review*, 38(1) (2015): 129–46.
- 12 Ibid.
- ¹³ Kevin Munger and Joseph Phillips, "A Supply and Demand Framework for YouTube Politics Introduction to Political Media on YouTube", *Penn State Political Science*, 2019; Alastair Reed and Haroro Ingram, "A Practical Guide to the First Rule of CT-CVE Messaging", *2nd European Counter-Terrorism Centre (ECTC) Advisory Group Conference*, 2019.
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- ¹⁵ Ibid., 16
- ¹⁶ Nicholas J. O'Shaughnessy, *Politics and Propaganda: Weapons of Mass Seduction*, (Manchester: Manchester University Press, 2004), 45.
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- ⁵⁵ We have opted not to provide a link to the website in question.
- ⁵⁶ Lakomy, "Let's Play a Video Game".
- ⁵⁷ Marcus Schulzke, "Simulating Terrorism and Insurgency: Video Games in the War of Ideas", *Cambridge Review of International Affairs*, 27, no. 4 (2014): 627–43.
- ⁵⁸ Selepak, "Skinhead Super Mario Brothers,": 36–37.
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- ⁶⁰ David Machin and Usama Suleiman, "Arab and American Computer War Games: The Influence of a Global Technology on Discourse,", *Critical Discourse Studies* 3, no. 1 (2006): 2.
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- ⁶² Ahmed Al-Rawi, "Video Games, Terrorism, and ISIS's Jihad 3.0": 746.
- ⁶³ Laura Huey, "This Is Not Your Mother's Terrorism: Social Media, Online Radicalization and the Practice of Political Jamming," *Journal of Terrorism Research*, 6, no. 2, (2015), 1-16.
- ⁶⁴ Jerome P. Bjelopera, "American Jihadist Terrorism: Combating a Complex Threat", *Congressional Research Service*, 2013; Scott Helfstein, *Edges of Radicalization: Ideas, Individuals and Networks in Violent Extremism* (U.S. Military Academy, Combating Terrorism Center, West Point, NY., 2012); Caroline Picart, "'Jihad Cool/Jihad Chic': The Roles of the Internet and Imagined Relations in the Self-Radicalization of Colleen LaRose" (Jihad Jane)', *Societies*, 5, no. 2 (2015): 354–83.
- ⁶⁵ Selepak, "Skinhead Super Mario Brothers".
- ⁶⁶ Lakomy, "Let's Play a Video Game": 398-9.
- ⁶⁷ There is a huge array of literature which privileges studying representations over gameplay. See, for example, Tracy L. Dietz, "An Examination of Violence and Gender Roles Portrayals in Video Games: Implications for Gender Socialization and Aggressive Behavior," *Sex Roles* 38, no. 5/6 (1998); Dmitri Williams *et. al*, "The Virtual Census: Representations of Gender, Race and Age in Video Games," *New Media and Society* 11, no. 5 (2009): 815-34; Vincent Cicchirillo, "Priming Stereotypical Association: Violent Video Games and African American Depictions," *Communication Research Reports*, 32, no. 2 (2015): 122-31; Sandra L. Calvert *et al.*, "The American Psychological Association Task Force Assessment of Violent Video Games: Science in the Service of Public Interest," *American Psychologist* 72, no. 2 (2017): 126-43.
- ⁶⁸ Frans Mayra, An Introduction to Game Studies: Games in Culture (London: Sage, 2008), 6.
- ⁶⁹ Jesper Juul, *The Art of Failure: An Essay on the Pain of Playing Video Games* (Cambridge, MA: MIT Press, 2013).

- ⁷⁰ Ian Bogost, *Unit Operations: An Approach to Videogame Criticism* (Cambridge, MA: MIT Press, 2006); Ian Bogost, "Playing Politics: Videogames for Politics, Activism, and Advocacy," First Monday 11, no. 7 (2006). Available at http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1617/1532 (accessed September 22 2020); Ian Bogost, "The Rhetoric of Video Games," in Katie Salen, ed., *The Ecology of Games: Connecting Youth, Games, and Learning* (Cambridge, MA: MIT Press, 2008), 117-140.
- ⁷¹ Bogost, "The Rhetoric of Video Games", 121.
- ⁷² Ian Bogost, *Persuasive Games: The Expressive Power of Videogames* (Cambridge, MA: MIT Press, 2007), 3-11. ⁷³ Ibid., 121.
- ⁷⁴ Ibid., 125.
- ⁷⁵ Mary Flanagan, Critical Play: Radical Game Design (Cambridge, MA: MIT Press, 2009), 249.
- ⁷⁶ James Paul Gee, *What Video Games Have to Teach Us About Learning and Literacy* (Palgrave Macmillan, New York, 2007), 155; See also Galloway, Gaming, 82.
- ⁷⁷ Robinson, "Videogames, Persuasion and the War on Terror": 518-9.
- ⁷⁸ In making this claim we are very minded that there are considerable differences in using the attributes of a game and effectively "reskinning" assets within it and building from the original game to profoundly change it. The latter requires considerable programming abilities, and whilst still technically a mod effectively amounts to producing a new game. Such competences are beyond those demonstrated by the existing terrorist-sympathising mods which we explore here.
- ⁷⁹ Galloway, *Gaming*, 84.
- ⁸⁰ Alexander Galloway, "Social Realism in Gaming", *Game Studies* 4 no. 1 (2004): 10; see also Souri, "The Political Battlefield of Pro-Arab Video Games": 546–50.
- ⁸¹ Miguel Sicart, *The Ethics of Computer Games* (Cambridge, MA: MIT Press, 2009), 191.
- ⁸² Ibid., 192.
- 83 Ibid., 194.
- ⁸⁴ Simon Egenfeldt-Neilsen, Jonas Heide Smith and Susana Pajares Tosca, *Understanding Video Games: The Essential Introduction* (London: Routledge, 2016 (3rd edition)), 274. For a comprehensive review from the active media perspective, see, for example, Calvert *et al.*, "The American Psychological Association Task Force Assessment of Violent Video Games". For a comprehensive review of the debate see Nicholas Robinson, "Video Games and Violence: Legislating on the 'Politics of Confusion'", *The Political Quarterly*, 83, no. 2 (2012): 417-8
- ⁸⁵ Sicart, *The Ethics of Computer Games*, 195. See also Egenfeldt-Neilsen et al, *Understanding Video Games*, 292-7 for exposition of what they term the 'active user perspective' which similarly argues that a focus on players is crucial.
- ⁸⁶ Sicart, The Ethics of Computer Games, 195
- ⁸⁷ Ibid. 197
- ⁸⁸ There is a huge amount of work from this perspective but for a seminal example see Craig Anderson and Karen Dill, "Video Games and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life", *Journal of Personality and Social Psychology* 78(4) (2000); see Egenfeldt-Nielsen et al, *Understanding Video Games*, 278-91 for a review; for a critique, see Christopher Ferguson, "Does Movie or Video Game Violence Predict Societal Violence? It Depends on What You Look at and When", *Journal of Communication*, 65(1) (2015), 193–212.
- ⁸⁹ Sicart, The Ethics of Computer Games, 203.
- ⁹⁰ Jesper Juul, "Fear of Failing? The Many Meanings of Difficulty in Video Games," in Bernard Perron and Mark J.P. Wolf, eds., *The Video Game Theory Reader 2* (London: Routledge, 2009), 247-8.
- ⁹¹ Miguel Sicart, *Beyond Choices: The Design of Ethical Gameplay* (Cambridge, MA: The MIT Press, 2013), 39.
 ⁹² Jenni Marsh and Tara Mulholland, "How the Christchurch Terrorist Attack was Made for Social Media" *CNN*,
 16 March 2019, https://edition.cnn.com/2019/03/15/tech/christchurch-internet-radicalization-intl/index.html
 (accessed September 22 2020); Michael Davis, "The Manifesto Posted On 8chan By Alleged El Paso Shooter Minutes Before Attack," (Washington: Middle East Media Research Institute) 6 August 2019, Available at https://www.memri.org/reports/manifesto-posted-8chan-alleged-el-paso-shooter-minutes-attack (accessed September 22 2020).
- ⁹³ See, for example, JM Berger, Kateira Aryaeinejad and Seán Looney, "There and Back Again: How White Nationalist Ephemera Travels Between Online and Offline Spaces", *The RUSI Journal*, 165, no. 1 (2020): 114-129; Luke Munn, "Alt-Right Pipeline: Individual Journeys to Extremism Online", *First Monday*, 24, no. 6 (2019). Available at: https://firstmonday.org/ojs/index.php/fm/article/view/10108/7920 (accessed September 22 2020); Julia Ebner, *Going Dark: The Secret Social Lives of Extremists* (London: Bloomsbury, 2020).