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RESEARCH ARTICLE

Playing doomsday: Video games and the politics of nuclear weapons

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Abstract

This article examines how nuclear weapons are depicted in video games. While the literature has explored the social and symbolic meanings of nuclear weapons and how they have been represented in popular culture, existing accounts have not thoroughly engaged with video games. Examining the bestselling game *Call of Duty*, I show how gameplay narratives contribute to normalising dominant knowledge about nuclear weapons. The overarching argument advanced in this article is that representations of nuclear weapons in video games contribute to legitimising the ongoing possession and modernisation of nuclear weapons. Drawing on feminist post-structuralist theory, I show how nuclear weapons are programmed to be an exclusive item that only the most skilled players can obtain, reinforcing the exclusionary power dynamics sustaining the nuclear status quo. Moreover, I show how game dynamics produce nuclear weapons as a win-condition, and thus a symbol of power and success that reinforces dominant understandings of their military value while masking the horror of killing. Deconstructing the playing dimension of video games, I situate the ludic aspect as a meaning-making system, working synergically with gameplay stories to reinforce dominant knowledge about nuclear weapons. Ultimately, the article draws attention to everyday discursive mechanisms that render a nuclear world possible.

Keywords: nuclear disarmament; nuclear weapons; popular culture; post-structuralism; the politics of play; video games

Introduction

The inspiration to write this article came from an interesting conversation with my neighbour's five-year-old daughter. The little girl and other kids from nearby houses were playing outside when I overheard her say, 'Careful, I have a nuke!' during what appeared to be a classic game of tag. As a scholar interested in the politics of nuclear weapons, I was intrigued by the fact that a five-year-old used the word 'nuke' to deter others from approaching her. I noticed that the other kids reacted with a mix of excitement and confusion; some expressed fear and ran away, and others said they had secret weapons too. Later that day, I went to my neighbour's house and asked if I could talk to the girl to understand her knowledge and expectations about nuclear weapons. When I asked her what a nuke was, she told me it was 'the most powerful bomb' and that those with it 'win the game'. Subsequently, I asked where she had heard the word nuke and how she knew it was a bomb. The little girl told me it was part of a game called *Call of Duty* that her brother played with friends online. 'If you are good enough in the game, you get a nuke, and once you drop the nuke, you win', she told me. Inspired by this episode, I decided to research how nuclear weapons are depicted in video games. I am particularly interested in exploring the narratives conveyed through this medium and examining how they shape expectations and reinforce specific realities about nuclear weapons.

Popular culture has gained considerable prominence in the discipline of International Relations (IR), with many scholars recognising its relevance to make sense of global politics.[1] Scholars have drawn attention to how TV shows, films, books, music, and magazines are products as well as productive of expectations in the social domain, functioning as discursive referent points of a particular reality.[2] Others have examined how popular culture is vital to understanding how 'power, ideology, and identity' are constituted.[3] Those examining the discursive role of video games in perpetuating and normalising expectations in social practice focus on how this cultural artefact offers a singular vehicle for producing, reiterating, and challenging knowledge.[4] The reconfigurability of play, along with the incentives and prizes, can create a range of possibilities in which the player actively engages in debates and experiences.[5] While the literature on video games and global politics has examined representations that make visible as well as underscore assumptions about how international politics operates,[6] existing approaches have not paid sufficient attention to how nuclear weapons are depicted and how such representations impact nuclear politics. Moreover, the literature has been less attentive to the dimension of play as a distinct feature associated with this medium that, together with what is being represented, has an impact on the production of knowledge about nuclear weapons.

Building on feminist post-structuralist literature as well as the body of work examining the importance of popular culture to make sense of global politics, I examine how gameplay narratives contribute to normalising dominant knowledge about nuclear weapons. Focusing my interrogations on the *Call of Duty* franchise, I argue that representations contribute to legitimising the ongoing possession and modernisation of nuclear weapons. I show how nuclear weapons are represented as an exclusive item that only the most skilled players can obtain, reinforcing the exclusionary power relations sustaining the nuclear status quo. Moreover, I show how game dynamics produce nuclear weapons as a win-condition, and thus a symbol of power and success that reinforces dominant understandings of their military value while masking the horror of killing. As I delve into the workings of each of these narratives, I show how representations reproduce colonial and gendered logics that make nuclear possession possible. Deconstructing the playing dimension

[1]Roland Bleiker, 'The aesthetic turn in international political theory', *Millennium: Journal of International Studies*, 30:3 (2011), pp. 509–33; William Clapton and Laura J. Shepherd, 'Lessons from Westeros: Gender and power in *Game of Thrones*', *Politics*, 37:1 (2017), pp. 5–18; Rhys Crilley, *Unparalleled Catastrophe: Life and Death in the Third Nuclear Age* (Manchester: Manchester University Press, 2023); Emily E. Faux, 'Navigating nuclear narratives in contemporary television: The BBC's *Vigil*', *Review of International Studies*, 50:6 (2024), pp. 987–1003, available at: {https://doi.org/10.1017/S026021052300075X}; Kyle Grayson, Matt Davies, and Simon Philpott, 'Pop goes IR? Researching the popular culture world politics', *Continuum Politics*, 29:3 (2009), pp. 155–63; Jutta Weldes, 'Going cultural: *Star Trek*, state action, and popular culture', *Millennium: Journal of International Studies*, 28:1 (1999), pp. 117–34.

[2]Tim Aistrope and Stefanie Fishel, 'Horror, apocalypse and world politics', *International Affairs*, 96:3 (2020), pp. 631–48; Crilley, *Unparalleled Catastrophe*; Faux, 'Navigating nuclear narratives in contemporary television'; Abigail E. Ruane and Patrick P. James, 'The International Relations of Middle-Earth: Learning from "The Lord of the Rings"', *International Studies Perspectives*, 9:4 (2008), pp. 377–94; Laura J. Shepherd, *Gender, Violence and Popular Culture: Telling Stories* (London: Routledge, 2013); Hebatalla Taha, 'Atomic aesthetics: Gender, visualization and popular culture in Egypt', *International Affairs*, 98:4 (2022), pp. 1169–87; Weldes, 'Going cultural', p. 117.

[3]Grayson, Davies, and Philpott, 'Pop goes IR?', p. 155.

[4]Ian Bogost, 'Comparative video game criticism', *Games and Culture*, 1:1 (2006), pp. 44–6; Nicolas de Zamaróczy, 'Are we what we play? Global politics in historical strategy computer games', *International Studies Perspectives*, 18:2 (2017), pp. 155–74; Nick Robinson, 'Videogames, persuasion and the War on Terror: Escaping or embedding the military entertainment complex?', *Political Studies*, 60:3 (2012), pp. 504–22; Nick Robinson, 'Have you won the War on Terror? Military videogames and the state of American exceptionalism', *Millennium: Journal of International Studies*, 43:2 (2015), pp. 450–70.

[5]Craig Hayden, 'The procedural rhetorics of *Mass Effect*: Video games as argumentation in International Relations', *International Studies Perspectives*, 18:2 (2017), pp. 175–93; Aggie Hirst, 'Wargames resurgent: The hyperrealities of military gaming from recruitment to rehabilitation', *International Studies Quarterly*, 66:3 (2022), pp. 1–14.

[6]Felix Ciută, '*Call of Duty*: Playing video games with IR', *Millennium: Journal of International Studies*, 44:2 (2016), pp. 197–215; de Zamaróczy, 'Are we what we play?'; Hayden, 'The procedural rhetorics of *Mass Effect*'; Robinson, 'Videogames, persuasion and the War on Terror', p. 175.

of video games, I situate the ludic aspect as a system of meaning production, working synergically with gameplay stories to reinforce dominant knowledge about nuclear weapons.

To do so, I examine *Call of Duty* games released between 2007 and 2023. *Call of Duty* is a bestselling first-person shooter video game franchise published by Activision and developed by Infinity Ward, Treyarch, Sledgehammer Games, and Raven Software. In its 20 years of existence, the series has sold over 425 million copies worldwide, making the franchise the fourth bestselling game in history after *Mario, Tetris*, and *Pokémon. Call of Duty: Modern Warfare II*, released in October 2022, made 1 billion dollars in 10 days.[7] The first game was released in 2003 and focused on World War II, while subsequent titles were set in the Cold War, futuristic worlds, and modern-day conflict scenarios. Nuclear weapons have been part of the multiplayer game experience in *Call of Duty* since 2009 and continue to be a highly anticipated feature.

Unlike most analyses published to date, my interrogations will focus on the multiplayer mode, also known as battle royale. The choice to engage with the multiplayer mode is due to its popularity among players, and therefore the opportunities this mode offers for reiterating knowledge. It is also important to note that stories about nuclear weapons have mainly been told through this mode of the game. Nonetheless, where nuclear weapons are depicted in the campaign mode, I offer an analysis of how depictions reinforce and/or challenge some of the representations seen in the multiplayer experience. The study draws upon 100 hours of multiplayer gameplay engagement through acclaimed YouTube and Twitch channels, such as the accounts managed by Seth Abner (known as Scump) and Damon Barlow (known as Karma).[8] Both Abner and Barlow are professional players who stream their *Call of Duty* matches to millions of viewers worldwide. The choice to engage with streaming material enabled me to access parts of the game that would have been impossible to do by simply playing it myself. As I explain in more detail in the following sections of this article, acquiring a nuclear weapon in *Call of Duty* is an exceptional accomplishment and, thus, something that requires great skill and gaming abilities. While many non-professional players can acquire nuclear weapons, engaging with the material streamed by Abner and Barlow ensures the veracity and quality of data. It is important to note that my analysis focuses on what is represented rather than players' opinions on nuclear weapons. As such, I used streaming material to understand how nuclear weapons are situated in the gameplay as well as the incentives and requirements for acquiring and detonating the bomb.[9] The analysis of campaign stories is conducted by using data revealed by developers and information offered by specialist websites such as IGN walkthroughs and data published on *Call of Duty*'s official blog.

To examine this data, I use a theoretical apparatus that builds upon feminist post-structuralist theory, particularly the work of Laura Shepherd[10] and Judith Butler.[11] My theoretical apparatus is centred on the assumption that discourse, broadly conceived, is productive of knowledge and, therefore, constitutive of what we know about the world and its possible futures. I conduct deconstructive discourse analysis to find the knowledge possibilities made intelligible upon representing nuclear weapons as a win-condition, an exclusive item, and something one can play with. Through

[7] Mike Hume, 'The future of *Call of Duty* and *Warzone*', *The Washington Post*, 8 June 2022, available at: {https://www.washingtonpost.com/video-games/2022/06/08/call-duty-future-modern-warfare-2-warzone-2/}; Gene Park, '20 years in, *Call of Duty* is a cultural and financial titan', *The Washington Post*, 28 October 2023, available at: {https://www.washingtonpost.com/entertainment/video-games/2023/10/28/call-of-duty-20-years/}.

[8] Upon watching the videos, I compiled detailed notes about the requirements to acquire a weapon and the consequences of detonating the nuclear weapon. I concluded that there were two central stories being told in *Call of Duty* games. One is centred on reward, and the other on success. These will be further examined in the following sections.

[9] This research uses publicly available material and follows the ethical guidelines by the Association of Internet Researchers (available at: {https://aoir.org/ethics/}).

[10] Laura J. Shepherd, *Gender, Violence and Security: Discourse as Practice* (London: Bloomsbury Academic, 2008); Laura J. Shepherd, *Narrating the Women, Peace and Security Agenda: Logics of Global Governance* (Oxford: Oxford University Press, 2021).

[11] Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (London: Routledge, 2006).

the 'excavation' of discourse, I seek to uncover the logics creating stability and authority of a particular form of knowledge about nuclear weapons. I then theorise how these narratives have an impact on what passes as normal in nuclear politics, inquiring into what the continuity of dominant discourses makes possible politically.

Understanding how nuclear weapons are represented is integral to grasping and seizing possibilities for policy innovation and change. As a state-centric issue, nuclear weapons tend to be examined as a problem that originates and terminates with the willingness of states to possess and subsequently disarm. In other words, the IR literature examining the variants contributing to the ongoing existence of nuclear weapons has primarily focused on how nuclear weapons are 'valued' within state discursive acts.[12] While this analysis is undoubtedly critical to understanding how the weapon 'acquires' its strategic and ideational value, more attention must be given to other forms of cultural intelligibility in which the weapon is made imaginable. This article advances an important contribution to nuclear weapons scholarship. It complements the literature that calls for a more holistic approach to understanding the structures of power and knowledge that make a nuclear world possible and places particular focus on the role of everyday practice and discourse in sustaining the nuclear status quo.[13] While popular culture alone does not do the work of perpetuating the nuclear status quo, a holistic examination that includes both state-centric and broader forms of cultural intelligibility is essential to make sense of the nuclear issue while theorising the way forward. As such, this article seeks to draw attention to the subtle processes of meaning production that construct and validate knowledge about nuclear weapons.

Beyond the context of nuclear politics, this article can be helpful in providing a framework for understanding structures of power and knowledge that make other pressing global issues possible. Its engagement with video games as a cultural artefact opens the possibility for thinking about other stories represented through this medium, particularly when it comes to new emerging technologies. Additionally, since many recreational video games are primarily played by young people[14] – often with younger siblings nearby who pick up on the content – this article raises significant questions about the kind of knowledge being passed on to the next generation, whom we hope will make a positive impact on the world.

The article proceeds in three parts. First, I introduce the literature on popular culture and IR, explaining how this literature will support the analysis of video games as sites of knowledge production. Then, I develop the central argument examining how nuclear weapons are depicted in *Call of Duty* games. In this section, I examine two narratives, namely the nuclear reward and the nuclear

[12]Shampa Biswas, *Nuclear Desire: Power and the Postcolonial Nuclear Order* (Minneapolis: University of Minnesota Press, 2014); Carol Cohn, 'Sex and death in the rational world of defense intellectuals', *Signs*, 12:4 (1987), pp. 687–718; Kjølv Egeland, 'The ideology of nuclear order', *New Political Science*, 43:2 (2021), pp. 208–30; Anne Harrington, 'Nuclear weapons as the currency of power', *The Nonproliferation Review*, 16:3 (2009), pp. 325–45; Carolina Panico, 'Making nuclear possession possible: The NPT disarmament principle and the production of less violent and more responsible nuclear states', *Contemporary Security Policy*, 43:4 (2022), pp. 651–80; Nick Ritchie, 'Valuing and devaluing nuclear weapons', *Contemporary Security Policy*, 34:1 (2013), pp. 146–73; Scott D. Sagan, 'Why do states build nuclear weapons? Three models in search of a bomb', *International Security*, 21:3 (1996), pp. 54–86.

[13]Laura Considine, 'Narrative and nuclear weapons politics: The entelechial force of the nuclear origin myth', *International Theory*, 14:3 (2022), pp. 551–70; Laura Considine, 'Rethinking the beginning of the "nuclear age" through telling feminist nuclear stories', *Zeitschrift für Friedens- und Konfliktforschung*, 12 (2022), pp. 185–193, available at: {https://doi.org/10.1007/s42597-022-00082-8}; Crilley, *Unparalleled Catastrophe*, p. 74; Faux, 'Navigating nuclear narratives in contemporary television'; Rebecca H. Hogue and Anaïs Maurer, 'Pacific women's anti-nuclear poetry: Centring Indigenous knowledges', *International Affairs*, 98:4 (2022), pp. 1267–88; Benoît Pelopidas, 'The birth of nuclear eternity', in Sandra Kemp, and Jenny Andersson (eds), Futures (Oxford University Press, 2021), pp. 484–500, available at: {https://doi.org/10.1093/oxfordhb/9780198806820.013.28}.

[14]In a survey conducted by the University of Massachusetts Lowell and published by the *Washington Post* in 2018, almost three-quarters of Americans ages 14–21 'either played or watched multiplayer online games or competitions' in 2017; see Emily Guskin, 'Teenagers are fuelling a competitive gaming tidal wave', *The Washington Post*, 9 March 2018, available at: {https://www.washingtonpost.com/news/sports/wp/2018/03/09/teenagers-are-fueling-an-e-gaming-tidal-wave/}.

success, and interrogate the play dimension of video games. The article concludes by advancing suggestions for future research.

Popular culture and knowledge production

Popular culture is not simply telling us a story; the story it tells has profound constitutive effects on the world. This is the central premise driving the analysis advanced in this article. To this end, the works of Roland Bleiker,[15] Laura Shepherd,[16] and Jutta Weldes[17] advance important theoretical tools to help us make sense of why popular culture matters and how it perpetuates particular realities, truths, and possibilities. Central to my argument is the idea that discourse is a productive apparatus that makes some realities intelligible while silencing others.[18] Of course, films, media, video games, and television are not the only artefacts propagating knowledge and, therefore, reiterating dominant forms of knowing the world. Nonetheless, these constitute forms of cultural intelligibility that are informed by expectations of what is accepted as normal and logical while also actively reproducing such realities. Following the post-structuralist concept of normalisation, the continuity of discourse, and thus the repeated representation of certain knowledge, is central to rendering what we know about the world pass as normal. As Butler explains in relation to gender norms, 'the norm only persists as a norm to the extent that it is acted out in social practice and re-idealised and reinstituted in and through the daily social rituals'.[19] Popular culture serves as a vehicle for propagating and normalising knowledge through its representational and performative qualities, which allow for the continuous repetition and reinforcement of discourse. Paying careful attention to popular culture is essential to gain a more holistic understanding of the politics of nuclear weapons, particularly the mechanisms beyond state elites' discursive acts that render nuclear weapons a persistent feature of global politics.

Through my interrogations of how nuclear weapons are depicted in video games, I seek to draw attention to the importance of reflecting on, as Shepherd[20] put it, 'how the "conceptual apparatus" regulating knowledge is produced and reproduced'. In doing so, I am able to see video games and their features less as trivial, simply playful, or unreal and more as active apparatuses for knowledge (re)production. Shepherd's work reminds us that knowledge is always unstable, plural, and multiple, and it is crucial to remain attentive to how and under what circumstances the dominant categories informing what is expected, valid, and acceptable are reinforced.[21] Like Shepherd, I see our engagement with popular culture as 'co-constitutive with the world and our place in it', and so, it is essential to acknowledge that 'no cultural artefact lends itself to a singular authoritative reading'.[22] As I work to understand games and what is represented in them, I also pay careful attention to how dominant understandings of the masculine and the feminine are reiterated in such stories, which remains central to understanding the world and its possible futures. As such, I seek to reaffirm the importance of a feminist curiosity as an analytical tool to identify and interrogate dominant discursive practices, inquiring into the potentialities made intelligible by the repetition and reiteration of gendered values and expectations.[23] Moreover, I also remain attentive to the legacies

[15] Bleiker, 'The aesthetic turn in international political theory'.

[16] Shepherd, *Gender, Violence and Popular Culture*.

[17] Weldes, 'Going cultural'.

[18] Butler, *Gender Trouble*; Shepherd, *Gender, Violence and Security*.

[19] Judith Butler, *Undoing Gender* (London: Routledge, 2004), p. 48.

[20] Shepherd, *Gender, Violence and Popular Culture*, p. 3.

[21] Shepherd, *Gender, Violence and Popular Culture*.

[22] Shepherd, *Gender, Violence and Popular Culture*, pp. 4–5.

[23] Cynthia Enloe, *Bananas, Beaches and Bases: Making Feminist Sense of International Politics* (Berkeley: University of California Press, 2014); Kimberly Hutchings, 'Feminist ethics and political violence', *International Politics*, 44 (2007), pp. 90–106; Laura Sjoberg and Caron E. Gentry, *Mothers, Monsters, Whores: Women's Violence in Global Politics* (London: Zed Books, 2007); Iris Marion Young, 'The logic of masculinist protection: Reflections on the current security state', *Signs*, 29:1 (2003), pp. 1–25.

of colonialism and how such logics are implicated in legitimising nuclear possession and the power relations sustaining the nuclear status quo.[24]

Jutta Weldes's work titled 'Going cultural: *Star Trek*, state action, and popular culture' marks an important methodological turn in the discipline of IR.[25] Through an engaging analysis of the discursive universe of *Star Trek*, Weldes directs the attention of IR scholars to the importance of popular culture and its role in the production of 'common sense' about international politics. We can think of culture as 'the context within which people give meaning to their actions and experiences and make sense of their lives'.[26] Understood in this way, 'culture encompasses the multiplicity of discourses or "codes of intelligibility" through which meanings are constructed, and practices are produced'.[27] Rather than simply a product of the discursive practices of political elites, Weldes argues, state policy has a 'pervasive cultural basis',[28] and state action is naturalised through popular culture. For example, the analysis of the TV show *Star Trek* reveals how this cultural artefact reproduces militarism while reiterating benevolent and liberal traits which form the basis of the United States foreign policy. With this, *Star Trek* 'parallels and reproduces elements of the common sense of the United States foreign policy discourse', and this further entrenches such expectations in the social domain.[29] Likewise, other works, such as Abigail E. Ruane and Patrick James's analysis of the *Lord of the Rings* novels[30] and William Clapton and Laura Shepherd's examination of *Game of Thrones*,[31] demonstrate how popular culture not only teaches us about the world and international politics but also influences critical engagement with portrayed realities. As such, even though Westeros, Middle-Earth, and *Star Trek*'s regions of space are 'unreal' worlds, they reproduce the politics of the world informing their creation and imagination. My analysis in this article relies on the theoretical foundations of this body of work. Revisiting the assumingly unreal scenarios of *Call of Duty*, I identify and map gameplay narratives while theorising how dominant knowledge about nuclear weapons, nuclear possessors, and the future is produced and validated.

In the context of nuclear politics, a burgeoning body of work continues to draw attention to the importance of interrogating the 'everydayness' of nuclear weapons,[32] with interventions emphasising how popular culture is informed by and reproduces the pervasive politics of nuclear weapons. Originally published in 1985, *The Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age*, written by Paul Boyer, offers an excellent analysis of the early atomic age, showing how the nuclear weapon gained a prominent space in American popular culture soon after the atomic explosions of 1945.[33] Hollywood launched several productions based on nuclear related themes, such as *The Beginning or the End* (1947), *On the Beach* (1959), and *The Day After* (1983). These early examples show how rather than a contemporary occurrence, nuclear weapons have a long history of representation within popular culture. More recently, studies have interrogated representations of nuclear related themes in TV shows, such as *Manhattan*[34] and *Vigil*,[35] and the films

[24]Biswas, *Nuclear Desire*; Ritu Mathur, 'Sly civility and the paradox of equality/inequality in the nuclear order: A post–colonial critique', *Critical Studies on Security*, 4:1 (2016), pp. 57–72; Ritu Mathur, '"The West and the Rest": A civilizational mantra in arms control and disarmament?', *Contemporary Security Policy*, 35:3 (2014), pp. 332–55.

[25]Weldes, 'Going cultural'.

[26]John Tomlinson, *Cultural Imperialism* (Baltimore: Johns Hopkins University Press, 1991), p. 7.

[27]Weldes, 'Going cultural', p. 118.

[28]Weldes, 'Going cultural', p. 118.

[29]Weldes, 'Going cultural', p. 133.

[30]Ruane and James, 'The International Relations of Middle-Earth'.

[31]Clapton and Shepherd, 'Lessons from Westeros'.

[32]Considine, 'Rethinking the beginning of the "nuclear age"'; Crilley, *Unparalleled Catastrophe*; Faux, 'Navigating nuclear narratives in contemporary television'; Taha, 'Atomic aesthetics'.

[33]Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (Chapel Hill: University of North Carolina Press, 2005).

[34]Considine, 'Narrative and nuclear weapons politics', p. 552.

[35]Faux, 'Navigating nuclear narratives in contemporary television'.

Oppenheimer and *Barbie*.[36] Rhys Crilley offers a fascinating analysis of how popular culture shapes the Third Nuclear Age, which includes a discussion of, for example, Sam Fender's award-winning record 'Hypersonic Missiles', which chronicles his felt insecurities regarding what is happening in the world.[37] As Christopher Nolan's new film continues to receive numerous awards, including seven Oscars, for its portrayal of Oppenheimer's journey towards becoming the 'destroyer of the worlds', it is important to pause to reflect on why some stories are (re)told and not others, and what the (re)telling of these stories do politically.

Video games and the continuity of nuclear exceptionalism

Video games have been sidelined in IR debates, often treated as 'unserious', 'apolitical', and less important than literature, film, or music when it comes to theorising global politics.[38] Nonetheless, a small but growing community of scholars continues to lead efforts to integrate video games into conversations about international politics.[39] What is unique about video games when compared to other forms of popular culture representation is that actors engaging with it are 'active participants' in the narrative rather than simply 'passive receptors'.[40] As Hayden explains, 'videogames incorporate the representative power of other cultural texts (e.g. film, television, literature) with the engaging dimension of play, which carries its own particular persuasive capacity to convey, normalise, and embed the value formations and tacit doxa of statecraft'.[41] Through these unique dynamics, IR scholars have drawn attention to games' capacity to normalise violence and military force, help interrogate and reflect upon the rules and incentives driving global political relations, create emancipatory and contestatory possibilities, and provide military rehabilitation and recruitment opportunities.[42]

Beyond IR, video games have been widely studied regarding their influence on individuals' opinions and behavioural choices, which includes conversations regarding games' capacity to cause and increase violence in the gamer.[43] While this is certainly an important discussion, this article does not engage with questions of subjectification (what games do to players).[44] Rather, I focus my interrogations on how video games offer opportunities for fixing and reiterating meanings, in line with the theoretical framework presented above. Nonetheless, I would like to acknowledge that ethnographic-based analyses could offer valuable research opportunities, including examining the individuals playing and watching streamed material.[45] My argument in this article is not that video games influence individuals' opinions about nuclear weapons, but rather that they create opportunities for the repetition and reinforcement of well-established knowledge about nuclear weapons.

[36]Emily Faux, 'Deserted myths and nuclear realities: Revisiting the symbolism of nuclear weapons in contemporary popular culture through *Oppenheimer*', *Media, War & Conflict*, 17:3 (2023), pp. 354–72; Emily Faux, 'What *Barbie* can teach us about nuclear weapons', *The Bulletin of the Atomic Scientists*, 3 August 2023, available at: {https://thebulletin.org/2023/08/what-barbie-can-teach-us-about-nuclear-weapons/}.

[37]Crilley, *Unparalleled Catastrophe*, pp. 74–5.

[38]Hirst, 'Wargames resurgent', p. 2.

[39]Helen Berents and Brendan Keogh, 'Dominant, damaged, disappeared: Imagining war through videogame bodies', *Australian Journal of Political Science*, 54:4 (2019), pp. 515–30; Ciută, '*Call of Duty*'; de Zamaróczy, 'Are we what we play?'; Hayden, 'The procedural rhetorics of *Mass Effect*'; Robinson, 'Videogames, persuasion and the War on Terror'; Aggie Hirst, '"Videogames saved my life": Everyday resistance and ludic recovery among US military veterans', *International Political Sociology*, 15:4 (2021), pp. 482–503; Mark B. Salter, 'The geographical imaginations of video games: Diplomacy, civilization, America's army and *Grand Theft Auto IV*', *Geopolitics*, 16:2 (2011), pp. 359–88.

[40]de Zamaróczy, 'Are we what we play?', p. 168.

[41]Hayden, 'The procedural rhetorics of *Mass Effect*', p. 179.

[42]Berents and Keogh, 'Dominant, damaged, disappeared'; Hayden, 'The procedural rhetorics of *Mass Effect*'; Robinson, 'Videogames, persuasion and the War on Terror'; Hirst, 'Videogames saved my life'.

[43]Craig A. Anderson, Douglas A. Gentile, and Katherine E. Buckley, *Violent Video Game Effects on Children and Adolescents: Theory, Research, and Public Policy* (Oxford: Oxford Academic, 2007).

[44]Aggie Hirst, 'Play in(g) international theory', *Review of International Studies*, 45:5 (2019), pp. 891–914.

[45]Daniel Bos, 'Answering the Call of Duty: Everyday encounters with the popular geopolitics of military-themed videogames', *Political Geography*, 63 (2018), pp. 54–64.

With this, my concern about the little girl using the language of nuclearism in the game of tag is that this knowledge, which originated from video games, is being performed in social practice.

Moreover, the fact that players actively engage in this cultural medium, including exchanges inside and outside of the game platform, creates performative opportunities that are unique to this type of cultural artefact. For example, in March 2024, Activision announced Season 3 of *Warzone*,[46] which added additional maps and features to the current game. One of the new features was the addition of special contracts, where players, after achieving certain requirements, could access an exclusive part of the game and collect nuclear material, assemble the nuclear weapon, and detonate it. The announcement prompted players to share their expectations and enthusiasm about nuclear weapons online,[47] while several specialist websites reported on the announcement, with some publishing walkthroughs on how to activate the special mission.[48] It is important to note that *Warzone* is a free-to-play game with a huge audience worldwide. As such, in addition to playing the game, this kind of engagement generates representational opportunities where nuclear knowledge is reproduced. The repeated reinforcement across various sites of knowledge production, including video games, will have an impact on how people think about it. In other words, this is a two-step process where video games generate knowledge reiteration opportunities, and the continuity of discourse helps legitimise what is represented.

With this, further clarification is needed regarding who is responsible for reiterating such knowledge, and what publics are influenced by such representations. While it is possible to study different audiences, for example, state elites, ordinary people, and youth, among others, and investigate how these people think about nuclear weapons, my approach is that doing so precludes important aspects of a broader and more preliminary process of meaning production operating in the social realm. This is not to say that the literature on public opinion about nuclear weapons is unimportant.[49] It is to say that it is also crucial to pay careful attention to how knowledge is reiterated and 'performed', and this complements public-opinion-centred interventions.[50] The theoretical apparatus introduced earlier, where repetition and reiteration are central to the continuity of dominant forms of knowing the world, enables me to focus on how knowledge about nuclear weapons is (re)constructed through performative and representational mechanisms that will then have an impact on an individual's perspectives and opinions.

Nuclear politics has a cultural basis, and video games are part of the knowledge-production apparatus that assigns political value to the bomb. Disarmament, as Nick Ritchie importantly argues, is contingent upon 'peeling away the layers of value to the point where it becomes politically, strategically, and socially acceptable to permanently relinquish a nuclear capability'.[51] As such, this article makes an important contribution to the scholarship that seeks to understand 'valuing' mechanisms and invites reflection on the subtle discursive dynamics that continue to validate nuclear weapons' strategic capabilities and prioritise violent and exclusionary forms of understanding the nuclear world. Nuclear disarmament depends on disrupting discourses that continue to reinforce structures of power and knowledge that make a nuclear world possible. Focusing on the everyday

[46]David Hodgson, 'Complete intel: *Call of Duty: Modern Warfare III, Call of Duty: Warzone*, and *Call of Duty: Warzone: Mobile Season 3*: Everything you need to know', Call of Duty blog, 27 March 2024, available at: {https://www.callofduty.com/blog/2024/03/call-of-duty-modern-warfare-iii-warzone-wzm-season-3-maps-modes-zombies-announcement#Quest}.

[47]See, for example, this post from Dexerto, a video game and entertainment news website operated by Dexerto Limited, 3 April 2024, available at: {https://x.com/charlieINTEL/status/1775572855893148051}.

[48]S. E. Doster '*CoD: Warzone* – How to do Rebirth Island's Champion's Quest Nuke Challenge', *Gamespot*, 28 March 2024, available at: {https://www.gamespot.com/articles/cod-warzone-how-to-do-rebirth-islands-champions-quest-nuke-challenge/1100-6522448/}.

[49]Some excellent works in this area include Joshua A. Schwartz, 'When foreign countries push the button', *International Security*, 48:4 (2024), pp. 47–86; Lauren Sukin, 'Credible nuclear security commitments can backfire: Explaining domestic support for nuclear weapons acquisition in South Korea', *Journal of Conflict Resolution*, 64:6 (2020), pp. 1011–42. Michal Smetana, Marek Vranka, and Ondřej Rosendorf, 'Public support for arms control in the Third Nuclear Age: Cross-national study in NATO countries', 10 July 2024, available at: {http://dx.doi.org/10.2139/ssrn.4881267}.

[50]For a database on people's opinions on nuclear use, see {https://www.prcprague.cz/nuclear-taboo-database}.

[51]Ritchie, 'Valuing and devaluing nuclear weapons', p. 146.

politics of nuclear weapons can help us uncover discursive practices that often remain invisible beneath the well-established assumptions surrounding the state-centric nature of nuclear politics.

Call of Duty and its worst-kept secret

While the nuclear weapon in *Call of Duty* has been tweaked and revamped over the years, in the multiplayer mode, it remains one of the most advantageous ways to gain match victories. Activision likes to refer to nuclear weapons as a 'worst-kept secret', as there is certain exclusivity, secrecy, and privilege surrounding the acquisition of these bombs. Ultimately, they are not primarily advertised as part of the game experience. The nuclear weapon is 'a hidden killstreak'; it becomes available only when players achieve an extraordinary score or milestone in the game. In campaign stories, while the dangerous nature of these weapons is depicted in some titles, representations also reinforce the extraordinary power and exceptionalist dynamics seen in multiplayer games. Table 1 shows a list of titles examined for this study and summarises key findings.

In the sections below, I focus on two specific game narratives: (i) *the nuclear reward* and (ii) *the nuclear success*. Deconstructing each of these stories in relation to the rules, incentives, and narratives shaping the gameplay experience, I show how *Call of Duty* reproduces well-established understandings about nuclear weapons, their possessors, and the future. I begin with an analysis of the requirements to acquire the weapon and then examine what happens when one is detonated. Where nuclear weapons are depicted in single-player campaign modes, I examined how representations reinforce and/or challenge multiplayer game dynamics.

The overarching argument I want to make is that, as a popular culture artefact, *Call of Duty* contributes to constructing knowledge about nuclear weapons in subtle but significant ways to very large audiences of people across the globe. Crucially, this work seeks to draw attention to the importance of interrogating, as Weldes put it, 'the everyday cultural conditions' that make a nuclear world possible.[52] These stories, and all stories we engage, tell, write, and play matter as representations and 'are never merely descriptive, but always normative and as such, exclusionary'.[53] There is something unique about video games that allows developers to insert certain conditionalities and create storylines that seem unattainable. However, at the same time, such stories represent imaginable worlds. The ambivalence and somewhat-extraordinary experience provided by video games, where one is granted permission to engage with the unthinkable and unspeakable, is in itself a story of nuclear politics.

The nuclear reward

In *Call of Duty*, to earn a nuclear weapon, players are required to achieve the highest scores or milestones at standards that are incredibly difficult to maintain. As the developers of *Warzone* recently revealed in an official blog post, '[the game] is hard, extremely intense, and the pacing is high', and 'if you hesitate or make a mistake, you'll probably fail'. Developers have designed game dynamics 'asking for perfection from players'.[54] In this context, nuclear weapons are portrayed as exclusive assets, secret weapons that only a select few can benefit from possessing. The rationale of all nuclear rewards in *Call of Duty*, except for the *Warzone* nuclear contracts, is that players must eliminate several enemies without dying. The number may vary depending on the game, but the logic remains the same. For example, in *Modern Warfare III*, a player must achieve 30 consecutive kills, a score that is statistically rare as it requires expertise, skill, and practice. In *Warzone*, developers introduced nuclear weapons as a special mission, where players need to achieve an impressive score before being granted access to this exclusive part of the game. The requirements are that players should win 5 consecutive matches or 30 matches in total in a single season. The Champions Quest,

[52]Weldes, 'Going cultural', p. 133.

[53]Butler, *Gender Trouble*, p. 166.

[54]Valerie Lee, 'Intel drop: Behind-the-Scenes with the Beenox Team', Call of Duty official blog, 29 March 2024, available at: {https://www.callofduty.com/blog/2024/03/call-of-duty-warzone-rebirth-island-return-beenox-interview#Resurgence}.

Table 1. Call of duty games by year.

Title	Year	Multiplayer depictions	Campaign depictions
Call of Duty 4: Modern Warfare	2007	Not featured.	A nuclear weapon is detonated and kills Sergeant Paul Jackson and several troops.
Call of Duty: Modern Warfare 2	2009	25 kills to earn the nuke; detonating it ends the game and grants immediate victory.	Previous detonation (CoD4) is briefly mentioned in the story; another nuclear detonation destroys International Space Station.
Call of Duty: Black Ops	2010	Not featured.	Due to tensions between the US and USSR, the US plans a pre-emptive nuclear strike.
Call of Duty: Modern Warfare 3	2011	25 kills to earn the M.O.A.B. (mother of all bombs); detonating it does not end the game but grants advantages.	A terrorist organisation seeks a code to activate a nuclear device.
Call of Duty: Black Ops II	2012	Not featured.	Not featured.
Call of Duty: Ghosts	2013	25 kills to earn the K.E.M. (Kinetic Energy Missile) Strike; detonating it does not end the game but grants advantages.	The game is set in a scenario that follows the nuclear destruction of the Middle East.
Call of Duty: Advanced Warfare	2014	30 kills to earn a DNA bomb; detonating it does not end the game but grants advantages.	The story's plot features a terrorist group launching simultaneous attacks against nuclear power plants worldwide, irradiating numerous cities, and killing 50,000 people.
Call of Duty: Black Ops III	2015	Not featured.	Not featured.
Call of Duty: Infinite Warfare	2016	25 kills with specific weapons to earn De-Atomizer Strike; detonating it ends the game and grants immediate victory.	Not featured.
Call of Duty: WWII	2017	Pre-requisites (earn prestige in every division at least one time), 25 kills to earn V2 Rocket; detonating it does not end the game but grants advantages.	Not featured.
Call of Duty: Black Ops 4	2018	Not featured.	No single player campaign mode.
Call of Duty: Modern Warfare	2019	30 kills to earn a tactical nuke; detonating it ends the game and grants immediate victory.	Not featured.
Call of Duty: Black Ops Cold War	2020	30 kills to earn a nuke; detonating it ends the game and grants immediate victory.	The campaign story revolves around preventing a nuclear conflict during the Cold War.
Call of Duty: Vanguard	2021	30 kills to earn V2 Rocket; detonating it ends the game and grants immediate victory.	Not featured.
Call of Duty: Modern Warfare II	2022	30 kills to earn a nuke; detonating it ends the game and grants immediate victory.	In Mission 17 the player must stop a missile headed to Washington, DC.
Call of Duty: Warzone	2020/ 2022	Win 5 consecutive matches or 30 in total within a single season to access the nuke contract; detonating it ends the game and grants immediate victory and special rewards.	No single-player campaign mode.
Call of Duty: Modern Warfare III	2023	30 kills to earn a nuke; detonating it ends the game and grants immediate victory.	Players must prevent the antagonist from securing nuclear material left behind in an abandoned nuclear power plant.

or nuke contract, as it is usually referred to, requires collecting nuclear materials, assembling a nuclear bomb, and detonating it.[55] To date, developers released several unique missions on different scenarios, such as the iconic Al Mazrah, Urzikstan,[56] and, more recently, Rebirth Island, where players must complete tasks within a specific time to complete the mission.

The nuclear reward enables players to decide and control the match's outcome, which is the most privileged position in the game. Detonating the nuclear weapon will grant immediate victory to the player and their team, as well as rewarding them with selected items. Interestingly, some titles, like *Modern Warfare 3* and *Ghosts*, feature other special weapons that are difficult to obtain and yield extra points. However, using these weapons does not end the game. The representations found in campaign stories are less explicit about the reward narrative and focus on the danger of having these technologies in the hands of irresponsible actors, such as terrorist organisations. To interrogate what is represented in the game and examine the realities informing depictions as well as how representations reiterate and/or challenge knowledge about nuclear weapons, I now turn my attention to critical nuclear weapons scholarship. This body of work explores how power inequalities, gendered understandings, and colonial logics perpetuate the nuclear status quo as well as how such inequalities are validated and sustained.

In *Nuclear Desire: Power and the Postcolonial Nuclear Order*, Shampa Biswas[57] draws attention to the exclusionary dynamics that sustain the nuclear status quo and how the often-acclaimed Non-Proliferation Treaty (NPT) institutionalises the norms that make inequalities possible. Questioning 'Whose order?', Biswas critiques the liberal 'triumphalist narrative' of the NPT and presents the treaty as an instrument of hierarchy ordering and a way to freeze the nuclear status quo, where only some states have access to what others are denied. The analysis captures the relations of power instituted by the rules of the NPT, where five states were acknowledged as nuclear-armed states while others committed to exercising nuclear restraint.[58] While the agreement rests upon the disarmament condition, progress has been minimal, with some scholars suggesting that the disarmament principle perpetuates possession rather than the elimination of nuclear weapons.[59] With this, the NPT is central to establishing and perpetuating inequalities in global politics and sets the standards and norms that can be used to justify political choices, including ongoing possession and modernisation, in nuclear politics.[60] As Biswas put it, non-nuclear states remain in the 'waiting room of history, never quite ready to handle the nuclear weapons that existing NWS [nuclear weapons states] deem necessary for their own security yet unavailable to NNWS [non-nuclear weapons states] regardless of their actual felt insecurities'.[61]

Critical scholars have drawn attention to a myriad of discursive mechanisms rendering nuclear possession acceptable.[62] Feminist contributions show how culturally embedded gendered understandings pervade global politics/nuclear politics and help legitimise nuclear hierarchies and possession.[63] I have shown elsewhere that gendered understandings about war are reproduced in nuclear discourse, and this helps nuclear possessors and their weapons to pass as normal.

[55] Doster, '*CoD: Warzone*'.

[56] Doster, '*Call Of Duty: Warzone*'.

[57] Biswas, *Nuclear Desire*.

[58] NPT, Treaty on the Non-Proliferation of Nuclear Weapons (NPT), UNODA, available at: {https://www.un.org/disarmament/wmd/nuclear/npt/text/}.

[59] Egeland, 'The ideology of nuclear order'; Panico, 'Making nuclear possession possible'.

[60] Joelien Pretorius and Tom Sauer, 'Is it time to ditch the NPT?', *Bulletin of the Atomic Scientists*, 6 September 2019, available at: {https://thebulletin.org/2019/09/is-it-time-to-ditch-the-npt/}.

[61] Biswas, *Nuclear Desire*, p. 97.

[62] See, for example, Laura Rose Brown and Laura Considine, 'Examining "gender-sensitive" approaches to nuclear weapons policy: A study of the Non-Proliferation Treaty', *International Affairs*, 98:4 (2022), pp. 1249–66; Cohn, 'Sex and death in the rational world of defense intellectuals', Claire Duncanson and Catherine Eschle, 'Gender and the nuclear weapons state: A feminist critique of the UK government's white paper on Trident', *New Political Science*, 30:4 (2008), pp. 545–63; Pelopidas, 'The birth of nuclear eternity'.

[63] Panico, 'Challenging war traditions'; Duncanson and Eschle, 'Gender and the nuclear weapons state'; Shine Choi and Catherine Eschle, 'Rethinking global nuclear politics, rethinking feminism', *International Affairs*, 98:4 (2022), pp. 1129–47.

The legitimacy and power of nuclear-armed states are contingent upon the intelligibility of non-nuclear actors' vulnerabilities and, thus, the very existence of such power relations.[64] Along similar lines, the concept of 'nuclear orientalism' advanced by Hugh Gusterson[65] sheds light on how the Western public discourse about nuclear weapons situates the bomb as a guarantor of security, a good weapon. In contrast, the weapons of others are portrayed as dangerous and evil, which also functions as a justificatory narrative. As a result, power inequalities as well as gendered and orientalist ideas shape the nuclear order and help constitute knowledge that upholds the legitimacy of the nuclear status quo.[66]

Moreover, colonial logics sit at the heart of the global nuclear order.[67] This is reflected not only in the institutional arrangements created to supposedly regulate nuclear technology but also in how these weapons are (or were) made, tested, and deployed. Arundhati Roy's analysis of nuclear weapons as 'the ultimate coloniser'[68] calls attention to how nuclear weapons are deeply entrenched, sometimes quite subtly, in mechanisms that seek to prioritise the purported security of some over the expense of the lives of others. To this end, the work of Teresia Teaiwa on how the bikini bathing suit manifests 'celebration and forgetting' of the nuclear power that 'strategically and materially marginalises and erases the living history of Pacific Islanders'[69] illustrates some of these violent mechanisms. Racialised perspectives shaped decisions about nuclear testing programmes, where colonial ideas depicted Indigenous peoples as expendable and their 'distant lands' as worthless. Using similar analytical tools, Gabrielle Hecht shows how the West relies on African uranium mining, drawing attention to the exploitation of the Global South to maintain the capabilities of nuclear-armed states.[70]

What is crucial for the argument advanced in this section is that relations of power are not merely exclusionary but also constitutive of the knowledge structures that make a nuclear world possible. While *Call of Duty* represents a seemingly simple narrative that rests upon the idea of rewarding deserving players, it reproduces, I argue, the exclusionary arrangements that sustain the nuclear status quo where only a few 'deserving' states are allowed to possess nuclear weapons. It celebrates the nuclear power that rewarded a few selected states with the capability to seemingly secure and protect while effectively endangering and harming those deemed less civilised, responsible, and skilled. Notably, the reward narrative – where players can decide the outcome of the match in their favour – represents the privileged and powerful position of nuclear-armed states in the global politics. In *Modern Warfare II*, for example, the image of the player pressing a button to deploy the bomb precisely reflects the perceived advantages and power of possessing nuclear weapons (Figure 1). This image reproduces the idea that the future hinges on the nuclear possessor's judgement, command, and control.

Power relations are also replicated through the 'Champions Quest' language used to identify the special nuclear contracts of *Warzone*. The words 'Champions' and 'Quest' reinforce the weapon's prestige and the exceptionalism that informs structures of knowledge legitimising its existence. It is something that only the most formidable players, the champions, will be able to experience. In video games, quests are generally associated with understandings of pleasure, great value, or significance which will lead to rewards and story progression. These meanings contribute to validating the exceptional value of nuclear weapons and situate the bomb as beneficial, helpful, and worth pursuing.

[64]Panico, 'Challenging war traditions'.

[65]Hugh Gusterson, *Nuclear Rites: A Weapons Laboratory at the End of the Cold War* (Berkeley: University of California Press, 1996).

[66]Crilley, *Unparalleled Catastrophe*; Pelopidas, 'The birth of nuclear eternity'; Teresia K. Teaiwa, 'bikinis and other s/pacific n/oceans', *The Contemporary Pacific*, 6:1 (1994), pp. 87–109.

[67]Karly D. Burch, 'The consequences of nuclear imperialism and colonialism', *Newsroom*, 23 November 2022, available at: {http://newsroom.co.nz/2022/11/23/the-consequences-of-nuclear-imperialism-and-colonialism/}.

[68]Arundhati Roy, *The End of Imagination* (Chicago: Haymarket Books, 2016), p. 59.

[69]Teaiwa, 'bikinis and other s/pacific n/oceans', p. 87.

[70]Gabrielle Hecht, 'Nuclear ontologies', *Constellations*, 13:3 (2006), pp. 320–31.

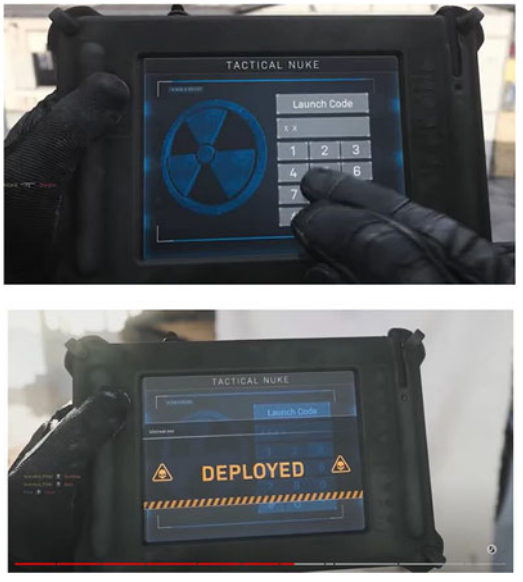

Figure 1. Deploying a nuclear weapon. Copyright © 2023 Activision Publishing, Inc., reproduced in accordance with fair use.

Campaign depictions of US-based protagonists fighting against irresponsible actors reinforce the logic of protection identified by feminist scholars. The game portrays characters racing against time to stop ballistic missile launches[71] and prevent attacks on nuclear power plants.[72] Many nuclear-armed states proudly present themselves as responsible stewards and protectors of world order,[73] which remains central, feminist scholars argue, to the legitimacy of configurations of power and the ongoing possession and modernisation of nuclear weapons. Thus, *Call of Duty* provides an opportunity to reinforce the knowledge structures, grounded in power relations, that make nuclear weapons a persistent feature of global politics. The narratives about nuclear weapons serve as important sites of knowledge production, making power hierarchies understandable while sustaining a discourse of responsibility that favours nuclear possession and perpetuates a violent status quo.[74]

Nuclear success

Detonating the bomb in Call of Duty triggers a countdown, followed by a screen displaying the words 'nuke' and 'victory' against the backdrop of a massive explosion (Figures 2, 3, and 4). Once it explodes and all players are, as many specialised websites describe, obliterated, victory is awarded to the player who deployed the weapon and their team, regardless of the match's score. Nuclear weapons are thus programmed as a win-condition, rewarding players for their skill and excellent performance. Nuclear detonations are less prominent in campaign stories, with only a few games incorporating nuclear explosions and ballistic missile launches in their storylines. Nonetheless, it is important to note that, differently from multiplayer games, campaign stories have not always portrayed nuclear weapons as beneficial and advantageous. In the famous 'Shock and Awe' mission in *Call of Duty 4*, a nuclear detonation in the Middle East kills a large number of troops, including

[71] *Modern Warfare 2, Modern Warfare II*, and *Modern Warfare III*.

[72] *Modern Warfare III*.

[73] See Panico, 'Challenging war traditions'; Duncanson and Eschle, 'Gender and the nuclear weapons state'.

[74] Laura Considine and James Souter, 'State responsibilities and international nuclear politics', in Hannes Hansen-Magnusson and Antje Vetterlein (eds), *The Routledge Handbook on Responsibility in International Relations* (London: Routledge, 2021), pp. 164–176.

Figure 2. *Call of Duty: Modern Warfare III* (2023). Follow-up screen after using a nuclear weapon. Copyright © 2023 Activision Publishing, Inc., reproduced in accordance with fair use.

Figure 3. *Call of Duty: Modern Warfare 2* (2009). Follow-up screen after using a nuclear weapon. Copyright © 2023 Activision Publishing, Inc., reproduced in accordance with fair use .

Figure 4. *Call of Duty: Modern Warfare* (2019). Follow-up screen after using a nuclear weapon. Copyright © 2023 Activision Publishing, Inc., reproduced in accordance with fair use.

the player's character, Sergeant Paul Jackson. Conversely, in *Modern Warfare 2*, a nuclear explosion creates an Electro Magnetic Pulse that disables electronic devices across the eastern United States and helps reduce some of the intense fighting around Washington, DC. Here, while the game shows images of a burning city and situates the nuclear weapon as responsible for destroying the International Space Station (ISS), the bomb is still featured in terms of its beneficial outcomes.

As I develop my analysis, I consider the win-condition in terms of achieving successful outcomes such as power, security, and stability. While nuclear weapons are detonated in the game,

these weapons are depicted as a valuable asset that grants a path to a favourable outcome, which is a prominent logic informing deterrence-oriented thinking about nuclear weapons.[75] In these terms, nuclear weapons are widely regarded as a security feature that can help maintain peace and stability (successful outcomes). In any case, portraying nuclear weapons as symbols of success is problematic; it still reinforces the strategic logic and perceived military value of these weapons.

The utility of nuclear weapons remains contested in the discipline of IR and in policymaking spaces, with many scholars and practitioners challenging its purported benefits.[76] Nonetheless, scholars have theorised how nuclear weapons may serve to balance power, deter aggression, and guarantee security.[77] As Hugh Gusterson shows in his anthropological study of nuclear weapons laboratories, the driving principle in these spaces was that 'nuclear weapons exist to save lives and prevent war'.[78] Beyond material capabilities, nuclear weapons have been socially constructed as 'the currency of power',[79] valued as 'a symbol of modernity',[80] and may also be associated with 'great power responsibility'.[81] Jacques E. C. Hymans's analysis of nuclear weapons utilising the 'bomb as God' metaphor captures how nuclear weapons are perceived as sublime, mysterious, and yet exceptionally powerful, and this shapes the political choices around non-proliferation and disarmament.[82] For instance, Robert Jay Lifton and Greg Mitchell argued in the 1990s that 'Oppenheimer was actually ambivalent toward the hydrogen bomb, but what he subverted in such a statement was precisely what nuclearism, from Truman onward, sought always to conceal: that they had surrendered to and at the same time identified with the weapon's promise of godlike power'.[83] Ultimately, for many states, particularly those that possess nuclear weapons, the bomb, like the representations in *Call of Duty*, is a life-changing tool to reverse the course of events regardless of the situation.

The exceptional nature of nuclear weapons and their capability to bring incontestable success is often invoked in state discourse. Nuclear-armed states speak of their nuclear arsenals as an asset to deter aggression and protect partners and allies while preserving global peace and stability. For example, in its Integrated Review of 2021, the United Kingdom refers to nuclear weapons as crucial 'to deter the most extreme threats to national security and way of life, helping guarantee security and that of allies'.[84] Similar ideas are laid out in the Integrated Review Refresh of 2023.[85] Likewise, NATO claims that 'it [the nuclear weapon] has the capabilities and the resolve to impose costs on the adversary that would be unacceptable and far outweigh the benefits that any adversary could

[75]Thomas C. Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 2020); Kenneth N. Waltz, 'The spread of nuclear weapons: More may be better. Introduction', *The Adelphi Papers*, 21:171 (1981), p. 1.

[76]Ray Acheson, *Banning the Bomb, Smashing the Patriarchy* (Lanham, MD: Rowman & Littlefield, 2021); Marianne Hanson, *Challenging Nuclearism: A Humanitarian Approach to Reshape the Global Nuclear Order* (Manchester: Manchester University Press, 2022); Alexander Kmentt, *The Treaty Prohibiting Nuclear Weapons: How It Was Achieved and Why It Matters* (London: Routledge, 2021).

[77]Waltz, 'The spread of nuclear weapons', p. 1; Bernard Brodie, 'The anatomy of deterrence', *World Politics*, 11:2 (1959), pp. 173–91; Schelling, *Arms and Influence*.

[78]Gusterson, *Nuclear Rites*, p. 57.

[79]Harrington, 'Nuclear weapons as the currency of power'.

[80]Sagan, 'Why do states build nuclear weapons?'.

[81]Michael Quinlan, *Thinking about Nuclear Weapons: Principles, Problems, Prospects* (Oxford: Oxford University Press, 2009).

[82]Jacques E. C. Hymans, 'The Bomb as God: A metaphor that impedes nuclear disarmament', *Security Studies*, 33:1 (2023), pp. 1–29, available at: {https://doi.org/10.1080/09636412.2023.2256655}.

[83]Robert J. Lifton and Greg Mitchell, *Hiroshima in America: A Half Century of Denial* (New York: Harper Perennial, 1996), p. 334.

[84]United Kingdom, 'Global Britain in a Competitive Age: The Integrated Review of Security, Defence, Development and Foreign Policy', March 2021, available at: {https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/975077/Global_Britain_in_a_Competitive_Age-_the_Integrated_Review_of_Security__Defence__Development_and_Foreign_Policy.pdf}.

[85]United Kingdom, 'Integrated Review Refresh 2023', 1 March 2023, available at: {https://assets.publishing.service.gov.uk/media/641d72f45155a2000c6ad5d5/11857435_NS_IR_Refresh_2023_Supply_AllPages_Revision_7_WEB_PDF.pdf}.

hope to achieve'.[86] What is noteworthy in these examples when compared to what is being represented in *Call of Duty* is that nuclear weapons are portrayed as decisive and precise responses that will generate the expected and favourable outcome no matter the obstacle. As the United Kingdom puts it, nuclear weapons ensure that other states 'can never use their nuclear weapons to threaten and constrain [their] decision making'.[87] In *Call of Duty*, nuclear capabilities are portrayed as a path to successful results, where players can control and secure the match, concepts linked to claims of strategic stability in global politics. Crucially, the overarching narrative in *Call of Duty* is that nuclear weapons are a guarantor of success, which replicates well-established ideas around these weapons' capability to guarantee security.

This perceived success in protecting, securing, and deterring has been addressed in several studies as knowledge that reiterates dominant understandings that make a nuclear world possible.[88] For example, Carol Cohn critiques the sense of control afforded by mastering the technostrategic language, including ideas about deterrence, and draws attention to how it is carefully crafted to produce a sense of calculated, successful, and rational choices.[89] However, this language, Cohn argues, 'does not allow certain questions to be asked or certain values to be expressed'.[90] This is important because, as in *Call of Duty*, the strategic discourse forecloses important ideas around the inhumanity of nuclear weapons. Likewise, Benoît Pelopidas critiques the overconfidence in the controllability of nuclear technology and draws attention to how states like France 'stand out for their public display of confidence in the perfect safety record of their nuclear arsenal'.[91] These ideas promote a view of nuclear weapons that overlooks alternatives to nuclear deterrence, such as the role of luck in preventing nuclear catastrophe, and downplays the urgent need to pursue nuclear disarmament. As such, the nuclear success narrative represented in *Call of Duty* is part of a cultural apparatus that continues to glorify nuclear weapons while silencing other mechanisms through which the weapon impacts the world, including neglecting the colonial, racialised, and gendered logics underpinning nuclear weapons' existence. As Cohn concludes, 'the dominant voice of militarised masculinity and decontextualized rationality speaks so loudly in our culture, it will remain difficult for any other voices to be heard until that voice loses some of its power'.[92]

What is crucial for the argument is that even though nuclear weapons have not been used since 1945 and have not been widely tested since the end of the Cold War, the understandings that informed these decisions and legitimised such actions still pervade the global nuclear order.[93] The success of nuclear-armed states in accumulating power and securing strategic advantages rests on supressing the humanitarian and environmental impacts of nuclear weapons. After the destruction of Hiroshima and Nagasaki, which by the end of 1945 had killed an estimated 214,000 people, nuclear-armed states conducted more than 2,000 nuclear detonations. These so-called tests not only displaced and harmed thousands of people but also still cause severe health problems in affected communities. The environment at testing sites has been dramatically affected, with many arguing that the worst is yet to come, as climate change will accelerate the degradation of structures

[86]NATO, 'NATO's nuclear deterrence policy and forces', 30 November 2023, available at: {https://www.nato.int/cps/en/natohq/topics_50068.htm}, accessed 28 March 2024.

[87]United Kingdom 'The UK's nuclear deterrent: What you need to know', 28 March 2024, available at: {https://www.gov.uk/government/publications/uk-nuclear-deterrence-factsheet/uk-nuclear-deterrence-what-you-need-to-know}, acessed 30 March 2024.

[88]Biswas, *Nuclear Desire*; Cohn, 'Sex and death in the rational world of defense intellectuals'; Crilley, *Unparalleled Catastrophe*; Panico, 'Challenging war traditions'; Benoît Pelopidas, 'The unbearable lightness of luck: Three sources of overconfidence in the manageability of nuclear crises', *European Journal of International Security*, 2:2 (2017), pp. 240–62.

[89]Cohn, 'Sex and death in the rational world of defense intellectuals'.

[90]Cohn, 'Sex and death in the rational world of defense intellectuals', p. 708.

[91]Pelopidas, 'The unbearable lightness of luck', p. 242.

[92]Cohn, 'Sex and death in the rational world of defense intellectuals', p. 717.

[93]It is crucial to remain attentive to how the language of 'testing' can obscure the real impacts of what in reality was the actual use of nuclear weapons. See Ruoyu Li, 'Testing as the blindspot of nuclear nonuse', *Security Studies*, 33:3 (2024), pp. 348–71.

Figure 5. *Call of Duty: Warzone* (2022). Follow-up screen after using a nuclear weapon. Copyright © 2023 Activision Publishing, Inc., reproduced in accordance with fair use.

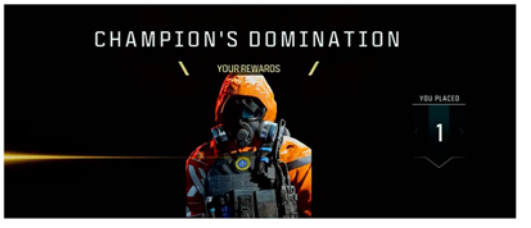

Figure 6. *Call of Duty: Warzone* (2022). Follow-up screen after using a nuclear weapon. Copyright © 2023 Activision Publishing, Inc., reproduced in accordance with fair use.

built to supposedly 'control' the spread of radioactive material.[94] Like the stories supressed to support the ongoing possession and modernisation of nuclear weapons, *Call of Duty*'s nuclear success narrative subdues the humanitarian and environmental impacts of nuclear weapons detonations.

Gameplay visuals are primarily focused on glorifying the magnificent mushroom cloud and its acclaimed features, e.g. bright red colours and mushroom-shaped cloud, which rapidly leads to an ending scene displaying the scores and granting victory to the nuclear possessor and their team (Figures 5 and 6). As a result, the use of nuclear weapons rewards those who possess them, just as nuclear use and testing have supposedly done, while simultaneously obscuring the ongoing devastation caused by nuclear detonations. The legitimacy of nuclear weapons is upheld not only by discourses celebrating their success but also by the silenced stories of nuclear harm and injustice. To this end, it is imperative to theorise the complex cultural mechanisms (re-)entrenching possibilities in which the weapon is a path to fortune rather than a catastrophe in global politics. Identifying and understanding these mechanisms is of utter importance for realising a world free of nuclear weapons.

The nuke pleasure and the politics of play

So far, I have examined the narratives represented in *Call of Duty* and focused on how these stories reinforce dominant knowledge about nuclear weapons and the nuclear status quo. As I have shown,

[94]Patricia A. O'Brien, '75 years after nuclear testing in the Pacific began, the fallout continues to wreak havoc', *The Conversation*, 5 April 2021, available at: {http://theconversation.com/75-years-after-nuclear-testing-in-the-pacific-began-the-fallout-continues-to-wreak-havoc-158208}; Lucy Sherriff, 'Endless fallout: The Pacific idyll still facing nuclear blight 77 years on', *The Guardian*, 25 April 2023, available at: {https://www.theguardian.com/environment/2023/aug/25/endless-fallout-marshall-islands-pacific-idyll-still-facing-nuclear-blight-77-years-on}.

while video games, as cultural texts, offer numerous possibilities for analysis, in this article, I have followed Ian Bogost's call to focus on what games do.[95] More specifically, rather than focusing on how games work, what social interactions they promote, or their psychological and cognitive implications, I am concerned about what video games make possible politically. To this end, in this section, I turn my attention to the 'playing' dimension of video games and what the representation of play, as discourse, enables and constrains.

Like many social sciences and humanities concepts, play has no set definition. Nonetheless, theorists tend to emphasise play's pleasurable and symbolic characteristics. While some forms of play might involve tension and unpleasant experiences, scholars have shown how people engage in play because of the joy it affords. In other words, play is often associated with positive feelings, happiness, excitement, and out-of-the-ordinary experiences in society and culture. Johan Huizinga defines play as 'a free activity standing quite consciously outside "ordinary" life as being "not serious", but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner'.[96] Jean Piaget refers to play as a 'happy display of known actions',[97] while Brian Sutton Smith argues that play 'is a pleasure for its own sake, but its genetic gift is perhaps the sense that life, temporarily at least, is worth living'.[98] Lev Vygotsky importantly adds an empowering layer to play. His theory suggests that 'a child always behaves beyond his average age, above his daily behaviour; in play it is as though he were a head taller than himself'.[99] While providing different visions of play, these definitions can help us see important normative expectations revolving around play as a social phenomenon. Crucially, play is expected to be fun, joyful, happy, empowering, and extraordinary, and this, I argue, is constitutive of the contexts in which play is enacted.

While a small but growing number of IR scholars have been studying and engaging with the phenomenon of play and its politics, play is still very much neglected in the discipline.[100] Like these scholars, I aim to draw attention to the importance of taking play seriously, and I hope my analysis here can open possibilities for further engagement with the dimension of play and its productive aspects. Play, I argue, works as a system of knowledge production, thus subtly adding a layer of meaning to what is being represented in the gameplay. It works as a discursive layer that is constitutive of a particular reality that, like the narratives I have shown earlier, reiterates dominant forms of knowing the nuclear world. While the game represents undefeatable, powerful, and exceptional weapons, it downplays the seriousness of these features, and in turn, of nuclear weapons themselves, through 'playing' them. This is not to say that the representation of play invalidates the productive nature of video games as a cultural medium. Rather, I situate this ludic aspect of video games as a meaning-making system, working synergically with gameplay stories to reinforce knowledge about nuclear weapons. The rationale behind this is that the representation of play, as a social practice that is often associated with pleasure, joy, symbolism, and extraordinariness, obscures the gravity of nuclear weapons as a global challenge. It enables the production of less dangerous and less violent bombs, something with which one can actually play and ultimately experience joy while bombing others.

The characteristics of nuclear weapons make it impossible to visualise or engage with the subject matter without using metaphors and abstractions. The very existence of nuclear weapons is

[95] Bogost, 'Comparative video game criticism'.

[96] Johan Huizinga, *Homo Ludens* (London: Taylor & Francis, 1998), p. 13.

[97] Jean Piaget, *Play, Dreams and Imitation in Childhood* (London: Psychology Press, 1999), p. 93.

[98] Brian Sutton-Smith, 'Play theory: A personal journey and new thoughts', *American Journal of Play*, 1:1 (2008), pp. 80–123 (p. 122).

[99] Lev S. Vygotsky, 'Play and its role in the mental development of the child', *Soviet Psychology*, 5:3 (1967), pp. 6–18.

[100] Hirst, 'Play in(g) international theory'; Maria Mälksoo, 'The challenge of liminality for International Relations theory', *Review of International Studies*, 38:2 (2012), pp. 481–94.

marked by the 'out of the ordinary' discourse, metaphors, and abstract symbols.[101] As Emily Faux explains, many features such as radioactivity and subatomic processes are portrayed as 'beyond human senses', and thus 'we can speak of them, and think of them only through metaphor'.[102] Considering this, I argue that the dimension of play in video games helps reproduce this sense of abstraction that sustains the intelligibility of nuclear weapons. As Huizinga put it, 'play is superfluous … play can be deferred or suspended at any time … play is not ordinary or real life. It is instead a stepping out of real life into a temporary sphere of activity with a disposition all of its own. Every child knows that he is "only pretending" or that it "was only for fun".[103] The nuclear sublime,[104] for example, which is often represented in images of nuclear explosions, nurtures understandings about the extraordinary and exceptional nature of the bomb, something that is 'fundamentally different from any other human creation'.[105] Notably, not only do video games provide a space for representing nuclear knowledge, but the very nature of this cultural artefact, as playful, reiterates modes of abstraction that perpetuate dominant understandings about the nuclear world.

It is important to note that my analysis here, as I explained earlier, focuses on what is understood as playing practice and how these understandings impact on what is represented in *Call of Duty*. However, I would like to acknowledge that an analysis of players' reactions, emotions, and opinions, in the context of play, as well as a detailed analysis of the reactions of those watching matches online, would constitute an important contribution. As I conducted my data collection, I noticed that players commemorate acquiring the nuclear weapon on various occasions, appearing pleasantly content with their achievements,[106] while millions of followers praise the 'glorious' undertaking. As Daniel Bos shows, studying the geopolitics of virtual war and examining players' imaginaries and fantasies concerning the ways in which war and militaries operate offer important insights into how individuals make sense of the world.[107] Bos calls attention to how, for example, play spaces, that is, online communities, are often 'gendered, heteronormative, and promote and reinforce national identities'.[108] Moreover, Bos's work invites more engagement with audiences and explains how studying interactions in these play spaces can reveal important dynamics through which geopolitical meaning is produced and validated. These encounters, Bos argues, form a complex web of representational practices, which, like Butler's normalisation mechanism, contribute to the (dis)continuity of what passes as true, valid, and normal in the social domain. While my approach in this article focused on representation and deconstruction, rather than ethnography, I do share Bos's concerns regarding practice and the 'performative' nature of play. What is certainly intriguing about the complexity of play is that nuclear weapons are being referenced or symbolised outside of video game settings, such as in games of tag.

To conclude, as a ludic setting, playing video games allows the dominant discourse about nuclear weapons to operate behind the veil of joyful and extraordinary moments. Huizinga explains that 'play may rise to heights of beauty and sublimity that leave seriousness far beneath'.[109] With this, the dimension of play, I argue, has profound constitutive effects on the realities represented,

[101] Cohn, 'Sex and death in the rational world of defense intellectuals'; Laura Considine, 'The standardization of catastrophe: Nuclear disarmament, the Humanitarian Initiative and the politics of the unthinkable', *European Journal of International Relations*, 23:3 (2017), pp. 681–702.

[102] Faux, 'Navigating nuclear narratives in contemporary television', p. 5.

[103] Huizinga, *Homo Ludens*, p. 8.

[104] The nuclear sublime is a reference to nuclear detonations and how they are perceived as extraordinary, and 'out of this world' experiences.

[105] Hecht, 'Nuclear ontologies', p. 321.

[106] See for example Karma, 'MY BEST TWITCH CLIPS | OPTIC KARMA', 3 July 2021, available at {https://www.youtube.com/watch?v=DCsneQmUpWw}; Karma, 'WORLDS FIRST MODERN WARFARE NUCLEAR!! MY FIRST GAME ON THE BETA! (COD: MW)', 12 September 2019, available at: {https://www.youtube.com/watch?v=d3Iqyf9omXA}; Scump, 'Scump drops the fastest nuke on Vanguard', 20 November 2021, available at: {https://www.youtube.com/watch?v=AzhXEhhHr-8}.

[107] Bos, 'Answering Call of Duty', p. 55.

[108] Bos, 'Answering Call of Duty', p. 62.

[109] Huizinga, *Homo Ludens*, p. 8.

reducing the seriousness of nuclear weapons as a global challenge and reinforcing their perceived extraordinary traits, all within the context of nuclear pleasure.

Conclusion

Video games are an important popular culture artefact that is constitutive of the nuclear weapons world and its possible futures. Using a feminist post-structuralist methodology, I interrogated how nuclear weapons are depicted in *Call of Duty* games. I identified two important narratives that reiterate structures of power and knowledge that legitimise nuclear weapons. The nuclear reward narrative reproduces exclusionary relations of power that sustain the dominant status quo, including colonial and gendered understandings that enable nuclear possessors to present themselves as responsible protectors. The nuclear success narrative reiterates knowledge about the military value of nuclear weapons and conceals the humanitarian and environmental impacts of nuclear detonations. Along with these stories, the dimension of play contributes to the ongoing dominance of certain ways of understanding the nuclear world, as it downplays the seriousness of what is being represented, while still serving as a powerful discursive tool that reinforces the extraordinary nature of nuclear weapons.

With this, this article sought to contribute to understanding the mechanisms that make nuclear weapons a persistent feature of global politics while inviting reflection on alternative frames that can generate discontinuity of dominant discourses. There is a growing body of work that evaluates the treatment of civilians in first-person shooters, and, as Neil Renic and Sebastian Kaempf suggest, integrating a more nuanced understanding of the laws of war into this medium would help challenge the idea that such rules cannot apply to the battlefield.[110] Similarly, I would suggest that the inclusion of alternative frames that explain and represent the humanitarian impact of nuclear weapons[111] would help challenge ideas that help legitimise nuclear possession. As Nick Robinson's work shows, while video games play an important part in militarism, they offer a potential space for interrogating and challenging these understandings.[112]

Along with a burgeoning body of critical nuclear scholarship, this analysis calls for serious engagement with everyday sites of knowledge production which remain crucial for making sense of global politics as well as realising possibilities for policy innovation and change. While the nuclear issue is closely associated with imperfect global governance institutions, exclusionary treaties, (ir)responsible state actors, wars, and many other complicated processes and procedures, the more obtuse forms of validating nuclear knowledge require our immediate attention. As such, I wonder where else nuclear weapons are used in play and how many other children are playing the 'nuke' tag game.

Video abstract. To view the online video abstract, please visit: https://doi.org/10.1017/S0260210525000087.

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[110]Neil C. Renic and Sebastian Kaempf, 'Modern lawfare: Exploring the relationship between military first-person shooter video games and the "war is hell" myth', *Global Studies Quarterly*, 2:1 (2022), pp. 1–11.

[111]The game 'Spec Ops: The Line', for example, depicts war from a critical perspective and has been designed to question dominant assumptions about war and violence.

[112]Nick Robinson, 'Militarism and opposition in the living room: The case of military videogames', *Critical Studies on Security*, 4:3 (2016), pp. 255–75.

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