

FORGING CONNECTIONS: THE SOCIAL DYNAMICS OF “DEATH STRANDING” AS A PARADIGM SHIFT IN GAMING

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Abstract. This paper explores the video game *Death Stranding* as a shift in digital interactive media, emphasizing altruism, collaboration, and social connection in its gameplay. The close reading of the game focuses on features that diverge from traditional norms, pivoting towards a more empathetic, community-driven model and identifies five domains of analysis: narrative infrastructure; game mechanics; player-to-player interactions; player-to-NPC interactions; and player interactions as a social agent. The findings are discussed with the possibility of defining a new genre, named by the game’s creator as a “strand game” (Kojima, 2019a, 2019b). The analysis reveals *Death Stranding’s* ability to create a deeply immersive sense of unity among players, demonstrating the game’s potential as a model for future video games that prioritize positive social interactions and mutual support.

Keywords: video games, cooperative games, virtual worlds, Death Stranding.

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Introduction

In recent years, there has been a growing interest in the incorporation of asynchronous collaborative gameplay mechanics in video games, prioritizing connections and cooperation over traditional competitiveness. Games such as *Journey* (Thatgamecompany, 2012), the *Dark Souls* franchise (FromSoftware, 2011, 2014, 2016), and *Ashen* (Annapurna Interactive, 2018) have explored this approach. However, there has been a lack of emphasis on the significance of asynchronous collaborative gameplay that establishes unconventional forms of connection. Therefore, this study aims to conduct a comprehensive analysis of the game *Death Stranding* (Kojima Productions, 2019) through an extensive playtime of 148 hours, including the collection of all game trophies. The analysis – performed through a close reading methodology – enables us to illuminate the game mechanisms that define a potential new genre referred to as a “strand game” (Kojima, 2019a, 2019b) – a game that emphasizes unconventional social connections and passive collaborations over immediate, conflict-oriented, and competitive interactions – and underscores the significance of forging novel social connections within the medium. The closed reading focuses on investigating how *Death Stranding* constructs its virtual world, characters, and gameplay mechanics around the themes of connection and collaboration amidst isolation and societal fragmentation. A special emphasis is given to elucidating the mechanics and experiences related to cooperative gameplay to shed further light on game mechanics that foster participation and collaboration.

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Cooperative design, construction, and progression have long been recognized as significant components in both digital and physical games. However, limited attention has been given to the discussion and documentation of this process (El-Nasr et al., 2010). Research has shown that engaging in cooperative gameplay can enhance prosocial behavior (Gentile et al., 2009; Granic et al., 2014; Dolgov et al., 2014) and empathy (Greitemeyer, 2013; Garcia et al., 2022). Despite the prominence of discussions on cooperation in multiplayer games, the implicit forms of collaboration in single-player games have been largely overlooked (Stenros et al., 2009). While previous studies have identified game design mechanisms that facilitate collaboration (Rocha et al., 2008; Reuter et al., 2014), they often draw examples from Massive Multiplayer Online Role-Playing Games (MMORPGs) and multiplayer first-person shooter (FPS) games, where distinct character roles complement one another, abilities synergize, and certain skills can only be applied to other players. The participation and collaboration observed in these genres primarily revolve around the eradication of AI-controlled or player-controlled adversaries. However, the focus of this study lies in exploring collaboration mechanisms that foster prosocial behavior beyond cooperative efforts centered on defeat, killing, and death as central gameplay elements.

Given that the close reading is conducted within the specific context of the COVID-19 pandemic, during which online social connections have become prominent practices, an inter-textuality emerges (Carr, 2009) where certain aspects of the game are prioritized, particularly the manner in which connections and collaborations are established and represented within the textual organization of the game's embedded connotations.

1. Passive collaboration in multiplayer games

For the purpose of this study, cooperative game play in single-player games which extends beyond traditional video game violence based actions is referred to as "*passive collaboration*". While some previous studies have defined such mechanics primarily based on their *asynchronicity* (Bogost, 2004; Saarenpää et al., 2009; Neto et al., 2020), this study adopts a perspective that considers the object-subject relationship perceived by players, as certain instances of passive collaboration can exhibit synchronous characteristics.

Zagal et al. (2000) provides a comprehensive framework outlining the six key characteristics of multiplayer games. These characteristics include: (1) the presence of social interactions among players that extend beyond gameplay considerations; (2) the inclusion of both competitive and cooperative gameplay mechanics; (3) the synchronicity of actions performed by players; (4) the coordination and enforcement of game rules; (5) the reliance on various props and tools, such as rule calculation mechanisms; and (6) the emergence of meta-games that coexist alongside the primary gameplay experience. Within this framework, social interactions, competitive nature, and synchronicity are considered distinct domains that may or may not manifest simultaneously.

Different perspectives on player interactions within multiplayer experiences can be observed in games such as *Journey*, *Ashen*, and the *Dark Souls* franchise (see Table 1). For instance, in *Journey*, players have the opportunity to encounter other players who appear as relatable reflections, yet there is no chat system or explicit information about the identities

Table 1. Examples of passive collaboration

Game	Mechanic
Journey	Players can meet other players during game play; however, they cannot communicate or interact. Players can help each other by guiding, but they cannot hinder progress.
Dark Souls	Players can leave messages on the floor of the game world to be read by other players. Not all messages appear for all players. The messages can only be formulated using existing phrases.
Ashen	Players can encounter other players in their game and can wander the world together.

of the other players. Instead, players can emit musical tones to communicate and establish a connection, thereby facilitating gameplay progression through collaboration (Spawforth and Millard (2017) offer further analysis of the social mechanics in this game). Game designer Jenova Chan, aiming to create an environment where cooperation is voluntary and competition is absent, has stated that the goal was to create a game where people felt they are connected with each other and to show the players the positive side of humanity in them (Smith, 2012).

Plessis (2018) also argues that the gameplay of *Journey* challenges the prevalent “utilitarian subject-object relations” found in many video games, which typically revolve around the violent acquisition of power and the subsequent utilization of that power against the game’s objects. This perspective aligns more closely with defining the fundamental approach of passive collaboration games compared to temporal factors like synchronicity.

Likewise, the *Dark Souls* series incorporates a notable feature known as the signpost mechanic, as identified by Touts et al. (2014), which enables players to leave messages on the ground for others to read. Manninen (2003) previously conceptualized the modification of environmental details and settings in a game as an instrumental action that players can utilize for communicative purposes. During a game session, an unspecified number of messages written by other players may appear, although their helpfulness is not guaranteed. To address this issue, the addition of positive or negative ratings to messages aims to enhance the reliability of the information conveyed. Furthermore, player death in *Dark Souls* can serve as a form of passive interaction or collaboration, as a bloodstain indicating the location of a player’s demise can appear in the game sessions of other players, serving as warnings of impending dangers. Game director Hidetaka Miyazaki explained that the ideology behind these asynchronous multiplayer features can be called a connection of mutual assistance between transient people (MacDonald, 2010).

In the game *Ashen*, a comparable manifestation of passive collaboration is observed. Players have encounters with companions; however, the absence of identifying markers or voice chat renders it impossible to discern whether these companions are AI-controlled characters or other players. Players are given the option to form alliances with these companions or proceed independently. The purpose of cooperating with another individual is to collectively surmount obstacles or eliminate enemies in a collaborative effort. The creative director of the game Derek Bradley explained that the game is a completely immersive experience with passive multiplayer functionality (Isaac, 2018).

Passive collaboration can stay as a direct contrast to previous literature that offer competitive game mechanics and strategies as being more engaging to players (such as Siu et al. (2014)) or that offer communication as an inseparable part of collaborative game design (such as Winn and Fisher (2004)).

2. Methodology

This article conducts a close reading analysis to explore the elements that contribute to an immersive form of passive collaboration in the highly acclaimed video game *Death Stranding* (Kojima Productions, 2019) through 148 hours of game play time where all game trophies are collected. The methodology employed entails a deep engagement with the gameplay experience, while maintaining a critical perspective on the game mechanics, world-building, and overall gameplay encounter. The gratifications derived from digital games, both hedonic and eudaimonic, depend on the interaction among three dimensions of player experience: narrative, mechanics, and context (Elson et al., 2014). Within this framework, the intricate interplay of narrative, mechanics, and context in *Death Stranding* fosters a compelling experience and cultivates social capital among players. The game uniquely combines cooperative game mechanics and asynchronous multiplayer features, prioritizing themes of unconventional social connections and passive collaborations over traditional video game violence. Recent research suggests that the feelings of cooperation versus competition can arise from the design of the game environments and world (Wintle, 2023) as well as other game features (Riar et al., 2023) rather than imminent and synchronous game actions.

Through this close reading, a particular emphasis was given to the game design mechanisms and storytelling techniques employed to (1) establish a sense of mutual but passive assistance and collaboration, and (2) design a game where players feel a connection and relatability to each other, despite not physically encountering each other within the game world. The method of close reading (Bizzocchi & Tanenbaum, 2011; Fernandez-Vara, 2015) has been demonstrated as an effective approach for analyzing video games and uncovering underlying layers of meaning within them. The methodology can analyze games that provide complex gameplay experiences such as *Mass Effect 2* (Bizzocchi & Tanenbaum, 2012) and *The Elder Scrolls IV: Oblivion* (Tanenbaum & Bizzocchi, 2009), and also capable of analyzing complex concepts like player motivations in games (Bostan & Sezen, 2022).

Additionally, secondary sources, such as interviews with developers and critics were drawn upon to augment the analysis.

3. Results and discussion

The results are discussed under five domains that outline how certain aspects of the game were constructed through game mechanics, design choices, narrative, and other elements: narrative infrastructure, game mechanics, player-to-player interactions, player-to-NPC (non-player character) interactions, and player interactions as a social agent. In order to facilitate an easier understanding of the game world and narrative, references are provided in Table 2.

Table 2. Terms related to *Death Stranding's* game world and narrative

Game	Mechanic
<i>Beached Things (BTs)</i>	The general name for the supernatural and paranormal phenomena and entities in the game world.
Chiralium	A fictional airborne particle that contributes to the increased strength of any BTs (Beached Things) encountered in that vicinity.
<i>Extinction Entity (EE)</i>	A specific paranormal entity whose purpose is to initiate mass extinction.
Seam	One of the two fictional purgatorial realms in the game. The Seam overlays the world of the game.
The Beach	The other fictional realm between the living world and what lies beyond. The Beach is separate from the world of the game.
Timefall	Rain that ages people and objects it touches.
Voidouts	Combat with the game's supernatural entities, the BTs, or another living being results in a "voidout" explosion, which leaves a permanent crater in the game world.

When perceived together as a whole, we argue that these aspects support the emergence of the game as a novel genre that this study names a strand game. The aspects of this genre that are outlined below persist through each play session even though they might be separate indeterministic experiences.

3.1. Narrative infrastructure of *Death Stranding*

The game *Death Stranding* unfolds in a post-apocalyptic setting, typically suggestive of a dystopian world. However, the game's nuanced narrative and thematic complexity also highlight certain utopian elements. The interplay between dystopian and utopian elements in *Death Stranding* presents a dichotomy reflecting human society's intricate nature.

The dystopian classification emerges from the game's presentation of a bleak, desolate world, where human life and society are under severe threat. The United States, in the game, has been devastated by a series of supernatural disasters, resulting in isolated cities and settlements. The setting shares striking similarities with classic dystopian tropes of devastated societies (Booker, 1994). The narrative is steeped in isolation, fear, and an underlying sense of despair, painting a grim picture of humanity's future. *Beached Things* (BTs) that now inhabit the world contribute to the bleak atmosphere of dread and hopelessness, which are hallmarks of dystopian narratives (Claeys, 2017).

However, a close examination reveals that *Death Stranding* also carries utopian elements. This utopianism is reflected not in the game's physical world, but in its underlying philosophy and societal structures. The main character, Sam Porter Bridges, embarks on a journey to reconnect isolated cities, creating a metaphor for unity and collaboration. This emphasis on connectivity and unity, in the face of grim circumstances, introduces a utopian flavor to the narrative (Moylan, 2000). In this sense, the game paints a utopian vision of human resilience and unity in the face of adversities.

Although the player-character in *Death Stranding* can be characterized as empathetic, he actively avoids contact with others and harbors no intention of assuming a leadership role within a community. Notably, the protagonist even exhibits haphophobia, a rare phobia involving the fear of being touched or touching others. Kunzelman (2019) even argued that the protagonist is nothing more than a supporting character in the longform tragedies of the people that survived the apocalypse.

According to Farca's (2018) definitions, the fictional world depicted in *Death Stranding* defies classification as a failed utopia or an anti-utopia devoid of any possibility for a better future. The game elucidates that throughout the history of life on Earth, five *Extinction Entities* (EEs) have been believed to cause five mass extinction events. These entities are depicted on *The Beach* serving as a reminder of the inevitability of such events. Importantly, these occurrences are considered natural processes inherent to the cycle of life and death on Earth, rather than being attributed to spiritual sins like pride, avarice, or ambition. Although the characters within the game remain uncertain about the possibility of averting such a mass extinction, their actions indicate a persistent sense of hope, particularly exemplified by the porters who traverse the inhospitable lands of the game to deliver packages and foster connections among people.

The underlying theme of *Death Stranding's* narrative criticizes an era characterized by individualism, where individuals exist in a state of fragmentation despite being interconnected. Turkle (2011), in her book "Alone Together: Why We Expect More from Technology and Less from Each Other", highlights how our pursuit of connectivity often leads us to spend more time with technology, effectively withdrawing from genuine human interactions. In the society portrayed in *Death Stranding*, interdependence among individuals is emphasized over reliance on technology. The game aims to evoke a sense of solitude within a fragmented society while simultaneously urging players to reconnect people by delivering packages and facilitating connections to the United Cities of America (UCA). The story explores themes of loneliness, despair, and distrust, while also highlighting the potential for friendship, trust, and connection.

The world-building of the game intersected and expanded in meaning when the COVID-19 pandemic emerged in prominence in the early months of 2020. McNulty (2020) mentioned that the self-enforced quarantine in *Death Stranding* is remarkably similar to real-world events occurring as a result of the COVID-19 pandemic. Like the underground survivors in Kojima's sci-fi world, people began to rely on others to bring them food, medicine and other essential items.

3.2. Game mechanics of *Death Stranding*

Post-apocalyptic games can usually be classified as "murder boxes" where killing and death are central parts of gameplay (Spokes, 2017), but *Death Stranding's* producer and director Hideo Kojima stated that he prioritized the theme of "connection" over traditional videogame "violence" (Gault, 2019). Video game combat, action-based play, and eventual representation of violence is closely related with the content of many videogames that rely on a neat cleaving of allies and enemies through a dehumanization of human victims (Kocurek, 2015).

Unlike other games where players often engage in violent combat to progress, *Death Stranding* encourages players to avoid conflicts. This approach aligns with studies by Ryan et al. (2006) which have shown that game narratives fostering non-violent interaction can lead to a more immersive experience. Furthermore, *Voidouts* impose tangible consequences on violent actions. The game mechanics thus discourage violence by making it a risky choice with significant implications, echoing the sentiments of Sicart's (2009) study on ethical game design.

Death within digital games can be interpreted as a reflection of the marginalization of death in the contemporary capitalist world (Nteali, 2015). However, in *Death Stranding*, killing other characters does not resolve the player's challenges but rather exacerbates them. If the player takes the life of another human being in the game, it triggers a *Voidout* – an explosive annihilation event with the potential to decimate an entire city. The player encounters adversaries known as MULEs, who can be classified as cargo thieves and terrorists, representing a decentralized faction of militant separatists within the game. The most effective approach to dealing with them is by utilizing non-lethal weapons, such as rubber bullets. One limitation of using non-lethal weapons is that the incapacitated enemies may eventually regain consciousness and continue to pose a threat. However, this consequence is deemed preferable when compared to the alternative of triggering a *Voidout*. The craters resulting from a *Voidout* render the affected area inaccessible to the player, and the heightened *Chiralium* density. To prevent these ramifications, it becomes imperative for the player to dispose of the deceased bodies through cremation at an incinerator. Therefore, if the player chooses to eliminate all the terrorists in a camp, they must invest the necessary time and effort to transport the bodies to an incinerator, as the consequences of killing another human being within the game carry dire repercussions. This contrasts starkly with many other games, where killing opponents often bears no substantial consequences.

In *Death Stranding*, the player-character assumes the role of a repatriate – a person capable of reconnecting their soul (ka) to their body (ha) within the *Seam*. This process resurrects the protagonist from the brink of death with each occurrence. When the player-character perishes, they enter a body of water and follow a "strand" back to their physical form, reappearing near the location of their presumed demise, albeit with any cargo in their possession lost. Within the *Seam*, the player may also encounter the souls of other deceased players who perished in the same vicinity and can engage in physical contact with them. These interactions enhance the player's connection with others and influence gameplay dynamics. This conceptualization of death engenders a paradigm shift among players, shifting their focus from solely caring about their character's survival to prioritizing the protection of their cargo. The player recognizes that the protagonist will not permanently perish, but the loss or damage of cargo carries more profound repercussions.

3.3. Player-to-player interactions

Alongside the emphasis on non-violence, *Death Stranding* also promotes collaboration among players. The game is predominantly single-player; however, players can indirectly interact with others by sharing resources, buildings, and useful game-world information, a mechanic referred to as "passive collaboration". This system encourages communal effort to

overcome challenges, reinforcing Bogost's (2005) notions of procedural rhetoric where game mechanics can serve to communicate messages and influence player behavior. Moreover, the game's narrative, centered around reconnecting isolated cities and people, complements the collaborative game mechanics. The player's objective to re-establish the "United Cities of America" strengthens the theme of unity and collaboration, paralleling Gee's (2007) concept of "semiotic domains", where game narratives and mechanics coalesce to promote a specific thematic message.

Survival within the post-apocalyptic realm of *Death Stranding* hinges upon the player's ability to construct various structures using a portable chiral constructor (PCC). These structures include bridges, timefall shelters, generators, safe houses, zip-lines, and postboxes, but the availability of chiral bandwidth limits the player's construction capabilities. Consequently, players cannot build everything they may require during their journey. A notable feature of the game's asynchronous multiplayer system is that structures built by other players may exist in one's own world, and vice versa. For instance, when a mission necessitates crossing a river, the player may encounter a bridge previously erected by another player. Similarly, if their vehicle is running low on power, they may chance upon a generator constructed by a fellow player. Furthermore, when the player's cargo begins to degrade due to *timefall*, they may seek refuge in a timefall shelter built by another player. During such encounters, players have the option to express appreciation and gratitude by giving "likes" to the structures created by other players. Similarly, structures built by the player will also accumulate likes if they prove helpful to others. Outlaw (2020) characterizes this gratifying and uplifting process as a desire to be of service to others, stemming not only from the gratification of receiving likes but also from the profound significance of the solitary journey undertaken by the player (and their awareness of other players undertaking similar journeys).

Traversing the expansive world of *Death Stranding* is an arduous endeavor, and constructing highways or roads can significantly facilitate the completion of deliveries. Importantly, roads serve as BT-free zones, and MULEs and terrorists tend to avoid them. Collaboration assumes greater importance during the road-building process, as significant resources such as ceramics, metals, and chiral crystals need to be invested into devices known as auto-pavers to construct each segment of road. As players contribute resources to an auto-paver, they become aware that other players are also making contributions to the same construction effort. Roads are built collectively, and when other players utilize the roads constructed by the player or roads to which the player has contributed, the player automatically receives likes from those individuals. Moreover, players can leave signs along the way, providing directions to points of interest or warning others of potential dangers. In this manner, although players may be physically isolated within the post-apocalyptic world of *Death Stranding*, they never feel truly alone, as they are constantly aware of their shared efforts to build a future alongside other players.

Inevitable losses of precious cargo are inherent to the gameplay experience of *Death Stranding*. Players may stumble and meet their "so-called death", encounter elimination at the hands of MULEs or terrorists, or have their cargo swept away by swiftly moving water currents. Notably, lost packages may appear in the worlds of other players, just as other players' lost packages may appear in one's own world. By selecting the "Deliver Lost Cargo" option

at a delivery terminal while in possession of lost cargo, players can return these packages to their rightful owners and receive likes as a form of appreciation. The players can retrieve their returned lost cargo from shared lockers located at safe houses or distribution centers. These shared lockers also serve as repositories where players can donate materials and equipment to other players. Individuals in need can access and utilize the contents of shared lockers. Additionally, players have the option to issue supply requests, specifying the items they require. Any player willing to help can then deliver the specified cargo to the designated location.

Apart from the structures constructed by other players, players do not physically encounter one another within the game. However, the player-character possesses the ability to shout out to the wilderness, hoping for a response. Although this act does not directly affect the gameplay, there are instances where the player may hear someone else's reply. This mechanic, known as a fourth wall-breaking element, represents an act of faith and collective effort aimed at improving the world within *Death Stranding*. The game's "A Shout in the Dark" trophy is linked to this phenomenon, as it is earned when the player sends out a shout and receives a response for the first time. For example, if the player shouts, "I'm Sam", they may hear the reply, "I'm Sam, too". This mechanic underscores the notion of faith and collective endeavor, wherein players strive to make the world of *Death Stranding* a better place.

3.4. Player-to-NPC interactions

Passive participation and collaboration among players within the post-apocalyptic world of *Death Stranding* is facilitated through unique game mechanics. It is essential to note that the collaborative elements of the game do not primarily revolve around cooperative efforts to eliminate enemies, as typically seen in traditional video game designs centered on conflict (Sliva, 2021). Instead, collaboration in *Death Stranding* focuses on establishing connections and upholding hope, as nearly every action undertaken in the game is geared towards altruistically assisting both in-game characters and players across the global community.

Another aspect of social connection that warrants attention pertains to the player's relationship with various non-player characters (NPCs). The narrative of *Death Stranding* comprises 14 chapters, each requiring the completion of several story-related orders by the player. Additionally, each knot city or prepper within *Death Stranding*'s virtual world offers optional deliveries referred to as standard orders. These standard orders contribute to the player's connection level with the respective characters, denoted by stars, and may occasionally yield unique rewards. Players can strengthen their relationships with NPCs by fulfilling orders assigned to them, although they also have the option to disregard these interactions. Those who choose to complete standard orders for NPCs receive e-mail messages from them, thereby creating a feedback mechanism that conveys a sense of agency and purpose in the player's actions. These e-mail messages encompass various elements, including character backstories, lore about the world of *Death Stranding*, noteworthy observations made by NPCs, and the NPCs' opinions on joining the United Cities of America (UCA). Most significantly, these messages reflect the bond formed between the player/character and the NPCs. Some of these messages unveil the game's underlying philosophy and emphasize the significance of connections, while others express appreciation for the collaborative efforts of all players worldwide in shaping the world of *Death Stranding* into a better place.

In *Death Stranding*, BBs are infants used as tools to detect supernatural entities known as BTs. Players are obligated to care for the BBs, incorporating nurturing mechanics usually absent in action-adventure genres. As Sicart (2009) outlines, ethical gameplay involves the player's moral responsibilities. The inclusion of BBs extends this responsibility, requiring players to adopt a caregiving role. This not only affects gameplay but also impacts the player's emotional experience, leading to unique player-BB interactions. The use of BBs in the game raises several ethical concerns. These infants are treated as tools, commodified, and subjected to potential danger, leading players to grapple with moral ambiguities, making decisions with ethical implications.

In-game characters express differing views on BBs, from treating them as equipment to acknowledging their humanity, creating ethical discourse. This interactive narrative design encourages players to question the ethical boundaries of technology and society, resonating with the principles discussed in Bogost's (2007) work on procedural rhetoric and ethics in games. The unique interactivity with BBs enhances players' emotional investment, intensifying the gaming experience. This increased emotional engagement, facilitated by ethical questioning, echoes theories in game studies that posit player's engagement increases when confronted with meaningful choices and emotional connections (Isbister, 2016).

Moreover, the player/character occasionally encounters other porters who are non-hostile NPCs engaged in their own deliveries. The option to trade with these porters allows players to exchange items, with the porter reciprocating by providing an item in return. Performing this act of generosity earns the player the "Any Porter in Storm" trophy. Witnessing other porters engaged in their own delivery tasks further reinforces the notion that the player is not alone in their journey.

3.5. Player interactions as a social agent

The progression system in *Death Stranding* deviates from the traditional RPG-like leveling system based on experience points. Instead, the player's progress is measured through a porter grade system represented by five distinct statistics.

- **Cargo condition:** By delivering cargo with minimal damage, the player's cargo condition stat increases.
- **Delivery volume:** The delivery volume stat is influenced by the quantity of cargo delivered.
- **Delivery time:** Timely delivery of time-sensitive packages contributes to the increase of the delivery time stat.
- **Miscellaneous:** The miscellaneous stat is boosted when the player retrieves items from areas occupied by BTs (paranormal entities) or MULEs (cargo thieves).
- **Bridge link:** Lastly, the Bridge Link stat increases as the player receives likes from other players, reflecting the connections formed within the game world.

These interrelated statistics demonstrate the innovative integration of gameplay mechanics, emphasizing the significance of forming connections with others to facilitate the advancement of these stats and collectively build the future. Achieving the highest porter grade, "The Great Deliverer", requires time, patience, and perseverance. One of the authors of this article achieved the "The Great Deliverer" porter grade after playing for 148 hours, accumulating 548,007 likes from other players.

The game menu in *Death Stranding* features a “Bridge Links” option that provides a list of players whose items or structures have appeared in the player’s game (see Figure 1). These are the players with whom the player has formed connections, discovered lost cargo, utilized bridges, traveled along roads, and more. Additionally, the menu includes a “Strand Contracts” option that enables players to compile a list of favorite players. When a player forms a strand contract with another player, the structures and items created by that player will appear more frequently in their own world (see Figure 6). The total number of likes received by a player serves as a significant metric in this context. A high number of likes indicates that the player’s structures have been deemed useful and have assisted numerous other players. By establishing a strand contract with such a player, the player can also benefit from strategically placed structures within their world. The ability to form strand contracts with other players is contingent upon the player’s porter grade, with higher grades enabling more substantial connections, increased mutual likes for structures, and greater opportunities for collaborative construction. Consequently, the features of “Bridge Links” and “Strand Contracts” transform the passive collaboration mechanisms of the game into active gameplay mechanics that construct a second self capable of influencing the experiences of other players. Kojima also stated that he aims to create a chain reaction of positivity with these game mechanics:

In games we default to doing things that benefit us: If I do this, I'll power up; if I do that, I'll make money. Even building bridges is motivated by personal gain – I want to get across this gap, so I'll build a bridge. But the bridges you build in DEATH STRANDING are shared with other players in the world, and they'll give your bridge a “like” when they use it. Once that happens you start thinking things like, “Huh, maybe that was a good spot for a bridge”, and then you build your next bridge in a spot that helps others as well as yourself. Maybe instead of throwing away items you don't need, you put them in a shared locker. My hope is that it creates a chain reaction of positivity. (Famitsu, 2019)



Figure 1. Bridge Links option, screen shot



Figure 2. Connections made with other players, screen shot

Conclusions

The examination of *Death Stranding* as a contemporary piece of digital interactive media has provided insightful revelations into how it diverges from the conventional combat-centric approach prevalent in video games and adopts a more empathetic, cooperative, and community-centric model. This pivot from the norm is an innovative development, representing an evolution in the medium that invites a broader spectrum of emotional engagement and social connection. According to Shoshani and Krauskopf (2021), a game cannot be considered prosocial if it promotes violence, even if it incorporates elements of reciprocity and cooperation. Therefore, it is crucial to examine how the collaboration mechanisms within *Death Stranding* foster prosocial behavior without emphasizing killing and death as central aspects of gameplay. Furthermore, an interview featured in the game, titled “Bridges Needs Homo Ludens”, underscores the significance of play in contemporary society, drawing inspiration from Huizinga’s (1950) perspective on the role of play in human life:

There is, however, another very special type of human. A breed that would serve Bridges rather well. Homo ludens – they who play. Be it deliberate or unintentional, Homo ludens unite people – creating culture, shaping the very world around them – not through violence, nor laws or proscriptions, but rather through metaphorical acts of play. (Kojima Productions, 2019)

The game’s meticulous design allows for an immersive narrative that goes beyond the singular perspective of the protagonist. It advocates for a more collective experience that fosters collaboration and altruism, even as it maintains its single-player format. This paradoxical approach engenders a sense of community and a shared purpose among players. These experiences, facilitated by the game’s passive collaboration mechanics, invite players

to recognize their interconnectedness and collective strength. The structures created and likes shared among players serve to consolidate their unity and a shared purpose within the isolated, post-apocalyptic landscape of the game.

The player-to-NPC interactions in *Death Stranding* demonstrate an interesting dimension of the game, wherein the players' relationships with NPCs are deepened through communication and fulfilling orders. The emphasis on relationship-building and offering assistance to the in-game characters further underscores the game's narrative focus on connection and unity. Moreover, the ethics introduced via interactions with the Bridge Babies (BBs) provoke players to contemplate moral ambiguities and the ethical boundaries of technology and society. This juxtaposition of emotional engagement and moral deliberation augments the overall narrative of the game and encourages players to reflect on their ethical responsibilities within the game's universe and perhaps even extend these considerations into their real-life scenarios.

The asynchronous multiplayer features, namely, "Bridge Links" and "Strand Contracts", coupled with the unique porter grade progression system, reinforce the player's role as a social agent within the game world. They not only serve to facilitate player progress but also transform the player's gaming experience into one that is significantly shaped by their interactions and relationships with other players. Notably, *Death Stranding* manages to merge gameplay mechanics and narrative seamlessly, emphasizing its thematic focus on connection, collaboration, and rebuilding in a post-apocalyptic world. This integration results in a game world that is dynamic and continually shaped by the collective actions of its players.

It is also important to consider the potential implications of the principles adopted in *Death Stranding* for the broader context of video game design. The game's emphasis on positive player-to-player interactions, cooperative problem-solving, and the propagation of a "chain reaction of positivity" represents an innovative approach in the industry. By rewarding altruistic behavior and prioritizing the act of aiding others, *Death Stranding* fundamentally reshapes the player's motivations and experiences. This change, if emulated by other game developers, could potentially lead to a shift in video game culture at large, encouraging players to work together rather than against each other, to consider the impacts of their in-game actions more deeply, and to derive satisfaction not merely from personal achievements but from collective progress as well.

In conclusion, *Death Stranding* represents a significant development in the realm of video games, demonstrating that games can transcend the traditional norms of gameplay to emphasize human connection, collaboration, and mutual support. Its unique approach to player interactions, ethical gameplay, and player progression system serve to redefine the player's role, from a solitary character to a social agent embedded within a global community. As video games continue to evolve as a medium, it will be interesting to observe how these concepts influence future game designs and player interactions. Ultimately, *Death Stranding* serves as an exemplar of how video games can be designed to foster a sense of unity and collective endeavor, offering insights into the potential future of the medium.

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References

- Annapurna Interactive. (2018). *Ashen* [Video game]. Los Angeles, CA, US.
- Bizzocchi, J., & Tanenbaum, J. (2011). Well read: Applying close reading techniques to gameplay experiences. In D. Davidson (Ed.), *Well played 3.0: Video games, value, and meaning* (pp. 262–290). ETC-Press.
- Bizzocchi, J., & Tanenbaum, J. (2012). Mass effect 2: A case study in the design of game narrative. *Bulletin of Science, Technology & Society*, 32(5), 393–404. <https://doi.org/10.1177/0270467612463796>
- Booker, M. K. (1994). *Dystopian literature: A theory and research guide*. Greenwood Press.
- Bogost, I. (2004). Asynchronous multiplayer: Futures for casual multiplayer experience. *Other Players*, 6(8).
- Bogost, I. (2005). The rhetoric of video games. In *The ecology of games: connecting youth, games, and learning* (pp. 117–140). MIT Press.
- Bogost, I. (2007). *Persuasive games: The expressive power of videogames*. MIT Press. <https://doi.org/10.7551/mitpress/5334.001.0001>
- Bostan, B. & Sezen, D. (2022). Player needs inventory (PNI): An analytical framework for analyzing player motives in video games. In *Proceedings of The 23rd annual European GAME-ON® Conference (GAME-ON® '2022) on Simulation and AI in Computer Games* (pp. 41–47).
- Carr, D. (2009). Textual analysis, digital games, zombies. In *Proceedings of the DiGRA 2009 Conference*.
- Claeys, G. (2017). *Dystopia: A natural history*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198785682.001.0001>
- Dolgov, I., Graves, W. J., Nearents, M. R., Schwark, J. D., & Brooks Volkman, C. (2014). Effects of cooperative gaming and avatar customization on subsequent spontaneous helping behavior. *Computers in Human Behavior*, 33, 49–55. <https://doi.org/10.1016/j.chb.2013.12.028>
- Eison, M., Breuer, J., Ivory, J. D., & Quandt, T. (2014). More than stories with buttons: Narrative, mechanics, and context as determinants of player experience in digital games. *Journal of Communication*, 64, 521–542. <https://doi.org/10.1111/jcom.12096>
- Famitsu. (2019). *Long-distance empathy: An interview with Hideo Kojima about DEATH STRANDING*. <https://www.famitsu.com/news/201911/02185866.html>
- Farca, G. (2018). *Playing dystopia – Nightmarish worlds in video games and the player's aesthetic response*. Transcript Verlag. <https://doi.org/10.1515/9783839445976>
- Fernandez-Vara, C. (2015). *Introduction to game analysis*. Routledge. <https://doi.org/10.4324/9780203794777>
- FromSoftware. (2011). *Dark Souls* [Video game]. Tokyo, Japan.
- FromSoftware. (2014). *Dark Souls 2* [Video game]. Tokyo, Japan.
- FromSoftware. (2016). *Dark Souls 3* [Video game]. Tokyo, Japan.
- Garcia, S., Ferguson, C. J., & Wang, C. K. J. (2022). Prosocial video game content, empathy and cognitive ability in a large sample of youth. *Journal of Youth and Adolescence*, 51(1), 62–73. <https://doi.org/10.1007/s10964-021-01512-1>
- Gee, J. P. (2007). *Good video games and good learning: Collected essays on video games, learning and literacy*. Peter Lang. <https://doi.org/10.3726/978-1-4539-1162-4>
- Gentile, D. A., Anderson, C. A., Yukawa, S., Ichori, N., Saleem, M., Ming L. K., Shibuya, A., Liau, A. K., Khoo, A., Bushmann, B. J., Huesmann, L. R., & Sakamoto, A. (2009). The effects of prosocial video games on prosocial behaviors: International evidence from correlational, longitudinal, and experimental studies. *Personality and Social Psychology Bulletin*, 35(6), 752–763. <https://doi.org/10.1177/0146167209333045>
- Gault, M. (2019). 'We're not thinking about others': What Hideo Kojima wants you to learn from *Death Stranding*. <https://time.com/5722226/hideo-kojima-death-stranding/>
- Granic, I., Lobel, A., & Engels, R. C. M. E. (2014). The benefits of playing video games. *American Psychologist*, 69(1), 66–78. <https://doi.org/10.1037/a0034857>
- Greitemeyer, T. (2013). Playing video games cooperatively increases empathic concern. *Social Psychology*, 44, 408–413. <https://doi.org/10.1027/1864-9335/a000154>
- Huizinga, J. (1950). *Homo ludens: A study of the play element in culture*. The Beacon Press.
- Isaac, A. (2018). *Ashen* interview: Xbox one exclusivity, multiplayer, combat and more discussed. *Gaming Bolt*. <https://gamingbolt.com/ashen-interview-xbox-one-exclusivity-multiplayer-combat-and-more-discussed>

- Isbister, K. (2016). *How games move us: Emotion by design*. Mit Press. <https://doi.org/10.7551/mitpress/9267.001.0001>
- Kocurek, C. A. (2015). Who hearkens to the monster's scream? Death, violence and the veil of the monstrous in video games. *Visual Studies*, 30(1), 79–89. <https://doi.org/10.1080/1472586X.2015.996402>
- Kojima, H. [@hideo_kojima_en]. (2019a, June 5). *As I'm getting similar questions so I shall re-post. DS is not a stealth game. Could move subjectively but not a PFS shooting game either. By incorporating with the concept of connection(strand), it's totally brand new genre called action game/strand game (social strand system)* [Tweet]. Twitter. https://twitter.com/HIDEO_KOJIMA_EN/status/1136074622711975936
- Kojima, H. [@hideo_kojima_en]. (2019b, June 6). *The name of the new genre is not made by the creator but it comes after. I know that but I just like to name it as I did in my past titles. Calling it as Social Strand System is similar case when I called Tactical Espionage Action before it was categorized as Stealth Game* [Tweet]. Twitter. https://twitter.com/HIDEO_KOJIMA_EN/status/1136484766176333824
- Kojima Productions. (2019). *Death Stranding* [Video game]. Tokyo, Japan.
- Kunzelman, C. (2019). Death stranding's hero is just a side character. *Vice*. https://www.vice.com/en_us/article/ne88g7/death-strandings-hero-is-just-a-side-character
- MacDonald, K. (2010). Souls survivor. Director Hidetaka Miyazaki discusses the origins and ideology behind From Software's masterpiece. *Eurogamer*. <https://www.eurogamer.net/articles/souls-survivor?page=3>
- Manninen, T. (2003). Interaction forms and communicative actions in multiplayer games. *Game Studies*, 3(1).
- McNulty, T. (2020). Death stranding is more relevant now than ever. *CBR*. <https://www.cbr.com/death-stranding-more-relevant-now/>
- Moylan, T. (2000). *Scraps of the untainted sky: Science fiction, utopia, dystopia*. Westview Press.
- Neto, A., Cardoso, P., & Carvalhais, M. (2020). Asynchronous interactions between players and game world. In *International Conference on Design and Digital Communication* (pp. 148–156). Springer, Cham. https://doi.org/10.1007/978-3-030-61671-7_14
- Nteali, R. E. (2015). Death in digital games: A thanatological approach. *Antae Journal*, 2, 89–100. <https://doi.org/10.1016/j.geb.2014.12.005>
- Outlaw, J. (2020). Asynchronous collaboration is motivating: The positive social experience of death stranding. *Medium*. <https://medium.com/@jessica.outlaw/asynchronous-collaboration-is-motivating-the-positive-social-experience-of-death-stranding-5a2a5d2692fd>
- Plessis, C. du. (2018). Subverting utilitarian subject-object relations in video games: A philosophical analysis of Thatgamecompany's Journey. *South African Journal of Philosophy*, 37(4), 466–479. <https://doi.org/10.1080/02580136.2018.1532189>
- Reuter, C., Wendel, V., Göbel S., & Steinmetz, R. (2014). Game design patterns for collaborative player interactions. In *DiGRA '14 – Proceedings of the 2014 DiGRA International Conference*.
- Riar, M., Morschheuser, B., Zarnekow, R., & Hamari, J. (2023). Altruism or egoism – how do game features motivate cooperation? An investigation into user we-intention and I-intention. *Behaviour & Information Technology*. <https://doi.org/10.1080/0144929X.2023.2196581>
- Rocha, J. B., Mascarenhas, S., & Prada, R. (2008). Game mechanics for cooperative games. In *Actas da conferência ZO. Digit. Games 2008* (pp. 73–80). Universidade do Minho, Porto, Portugal.
- Ryan, R. M., Rigby, C. S., & Przybylski, A. (2006). The motivational pull of video games: A self-determination theory approach. *Motivation and Emotion*, 30(4), 344–360. <https://doi.org/10.1007/s11031-006-9051-8>
- Saarenpää, H., Korhonen, H., & Paavilainen, J. (2009). Asynchronous gameplay in pervasive multiplayer mobile games. In *CHI '09 Extended abstracts on human factors in computing systems* (pp. 4213–4218). ACM. <https://doi.org/10.1145/1520340.1520642>
- El-Nasr, M. S., Aghabeigi, B., Milam, D., Erfani, M., Lameman, B., Maygoli, H., & Mah, S. (2010). Understanding and evaluating cooperative games. In *Proceeding of the SIGCHI Conference on Human Factors in Computing Systems CHI'10* (pp. 253–262). ACM. <https://doi.org/10.1145/1753326.1753363>
- Sicart, M. (2009). The ethics of computer game design. In *Proceedings of the Philosophy of Computer Games Conference*. <https://doi.org/10.7551/mitpress/9780262012652.001.0001>

- Siu, K., Zook, A., & Riedl, M. O. (2014). Collaboration versus competition: Design and evaluation of mechanics for games with a purpose. In *FDG 2014. Proceedings of the 9th International Conference on the Foundations of Digital Games* (pp. 14–22).
- Spawforth, C., & Millard, D. E. (2017). A framework for multi-participant narratives based on multiplayer game interactions. In *International Conference on Interactive Digital Storytelling* (pp. 150–162). Springer. https://doi.org/10.1007/978-3-319-71027-3_13
- Shoshani, A., & Krauskopf, M. (2021). The Fortnite social paradox: The effects of violent-cooperative multi-player video games on children's basic psychological needs and prosocial behavior. *Computers in Human Behavior*, 116, Article 106641. <https://doi.org/10.1016/j.chb.2020.106641>
- Sliva, M. (2021). Death stranding is the defining game of 2020 (despite releasing in 2019). *Escapist Magazine*. <https://www.escapistmagazine.com/v2/death-stranding-is-the-defining-game-of-2020-despite-releasing-in-2019/>
- Spokes, M. (2017). 'War...war never changes': Exploring explicit and implicit encounters with death in a post-apocalyptic gameworld. *Mortality*, 23, 135–150. <https://doi.org/10.1080/13576275.2017.1319348>
- Stenros, J., Paavilainen, J., & Mäyrä, F. (2009). The many faces of sociability and social play in games. In *Proceedings of the 13th International MindTrek Conference: Everyday Life in the Ubiquitous Era* (pp. 82–89). ACM. <https://doi.org/10.1145/1621841.1621857>
- Tanenbaum, J., & Bizzocchi, J. (2009). Close reading Oblivion: Character believability and intelligent personalization in games. *Journal of the Canadian Game Studies Association*, 3, 524–541.
- Thatgamecompany. (2012). *Journey* [Video game]. Los Angeles, CA.
- Toups, Z. O., Hammer, J., Hamilton, W. A., Jarrah, A., Graves, W., & Garretson, O. (2014, October 19–21). A framework for cooperative communication game mechanics from grounded theory. In *Proceedings of The First ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play* (pp. 257–266). Toronto, Ontario, Canada. ACM Press. <https://doi.org/10.1145/2658537.2658681>
- Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other*. Basic Books.
- Winn, B. M., & Fisher, J. W. (2004). Design of communication, competition, and collaboration in online games. In *Dipresentasikan Dalam Computer Game Technology Conference*. Toronto, Canada.
- Wintle, P. (2023). Mutants and zombies everywhere! Or villains, violence, and selfishness: Questions of humanity in the post-apocalyptic (pandemic) video game. *Game and Culture*, 15554120231182802. <https://doi.org/10.1177/15554120231182802>
- Zagal, J. P., Nussbaum, M., & Rosas, R. (2000). A model to support the design of multiplayer games. *Presence: Teleoperators & Virtual Environments*, 9(5), 448–462. <https://doi.org/10.1162/105474600566943>