Pornographic Games on Steam: Genres, Modes, and Milieus

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ABSTRACT

Pornographic games have historically been distributed outside of mainstream channels. Steam, in 2018, change its policy allowing uncensored pornographic games to be sold. We found 452 games or DLCs that were tagged as mature content and sexual content. We analyzed 40 of those games in detail. 17.5% of these games only contain nudity while the rest graphically depicted sex. *Visual novels* and *adventure games* were the most numerous genres. Drama and fantasy were the most used milieus. Two of the games contained only male-male sex whereas the rest depicted heterosexual sex or heterosexualized same-sex sex. The pornographic scenes or nude images were tied to the game's progression structure.

Keywords

Steam, pornography, genre

INTRODUCTION

Krzywinska (2015) points out that "there is proportionally little sex in games in relation to other media". Brathwaite (Brathwaite 2007) argues that this is due to the gatekeeping of game publishers and retailers. Hardcore pornographic games have existed outside the mainstream publishing ecosystems and separate from mainstream games with sexual content (Brathwaite 2007; Krzywinska 2015; Lankoski and Dymek 2020). Currently, pornographic game development is funded using, for example, the Patreon platform (see Lankoski and Dymek 2020) and a major publisher Steam has opened its doors for pornographic content. According to Orland (2018) *Negligee: Love Stories* (Dharker Studio, 2018) was the first adult game published on Steam *uncensored*. We are aware that pornography is hard to define (cf. McKee et al. 2020) and provide more detailed descriptions of the contents of the games in the coming discussion. New development platforms, such as Ren'py and Unity, and asset stores selling, for example, 3D models and animations have provided new kinds of opportunities for pornographic game production.

Krzywinska (2015) proposed that erotic games can be understood as libidinal economies where game mechanics, story structure, and representation work in conjunction. Krzywinska uses as an example *Playboy: The Mansion* (2005) where

actions such as social interactions (flirting, gossiping, hugging, having sex) and taking photographs are tied to erotic representation and the story of being a playboy. Passmore et al. (2020) using Krzywinska's concept of *libidinal investment* (that is a part of the libidinal economy) identify a set of game design patterns in free online adult games and connect the premises behind the design patterns to heteronormative attitudes towards sex. Hart (2015) argues sex is non used only as a reward but as a part of the structure where Hollywood-style sex scenes are not the main reward instead, bonuses or upgrades are the main rewards for reaching the goal. In contrast, Ware (2015) stresses that sex is used as a reward in many games for good behaviour towards women. However, the player's experience of these kinds of mechanization of relations and communications of sex does not always correspond to the player's interpretations and experiences. Waern (2011) analyzed players' discussions about romances in games and concluded that the players express emotional attachment and even romantic feelings towards game characters. According to the analysis, player choice and partial agency in how romances progress (towards sex) are crucial components in player attachment. Waern also points out that games provide a safe zone to explore romances.

Bateman and Zagal (2018) argue that understanding specific game design elements requires understanding the context in which those elements are designed. A similar argument has been advanced by Apperley and Parikka (2018) when they connect media archaeology to platform studies: to understand games and their history, it is relevant to look also at (sociotechnical) platforms.

King and Krzywinska (2002) distinguish *platform*, *genre*, *mode*, and *milieu* as levels of analyzing games. According to them, *platforms* and hardware on which games are published can have an impact on what types of games are published for that platform (e.g., Sony has tight control over that). With *genre*, they refer to common categories used to describe gameplay (management., stealth, strategy). *Mode* is used to denote how the game world is experienced by the players, e.g., 1st person perspective or isometric perspective, and *milieu* is about stylistic conventions and narrative. (King and Krzywinska 2002)

This is an explorative study focused on understanding pornographic games sold on Steam and finding out what kind of games these pornographic games are. We are especially interested in what design conventions these pornographic games follow.

METHOD
Search of games with the "sexual content" tag was performed on Steam on September 4, 2022. This search yielded 1004 applications. More detailed data was fetched for these applications using a Python script. Games without adult content descriptions were excluded. *Heavy Rain* and *Mass Effect: Legendary Edition* are examples of excluded games. In addition, two soundtracks of a game were excluded. After exclusions, the data contained 452 games or DLCs (digital downloadable content, extensions to the games). A DLC might be equivalent to a game. For example, *Being a DIK, Season 2* is provided as a DLC for *Being a DIK, Season 1* and *College Kings 2: Episode 1* (Undergrad Steve, 2022) as a standalone game.

Of the 452 games and DLCs found, 40 were randomly sampled for further analysis. The games in the sample are listed in the Appendix. We focused on *genre*, *mode*, and *milieu* in our analysis. As all games were on Steam, we excluded the *platform* from our analysis. These 40 apps were analysed in more detail. Steam game descriptions, videos, images, and games themselves were used as materials. The number of sales was

estimated using the number of reviews and NB number (Carless 2020) when VG Insights did not provide sales estimates.

GAMES

Adult games found were published in 2015 and after. Figure 1, shows the number of adult games published by year and the number of early access games on Steam. Data contains 430 games and 23 DLCs. 23 games are tagged as *free-to-play* games and 51 as *early access* games. Early access games are still in development. Figure 1 shows a steady increase in the number of adult titles published on Steam.
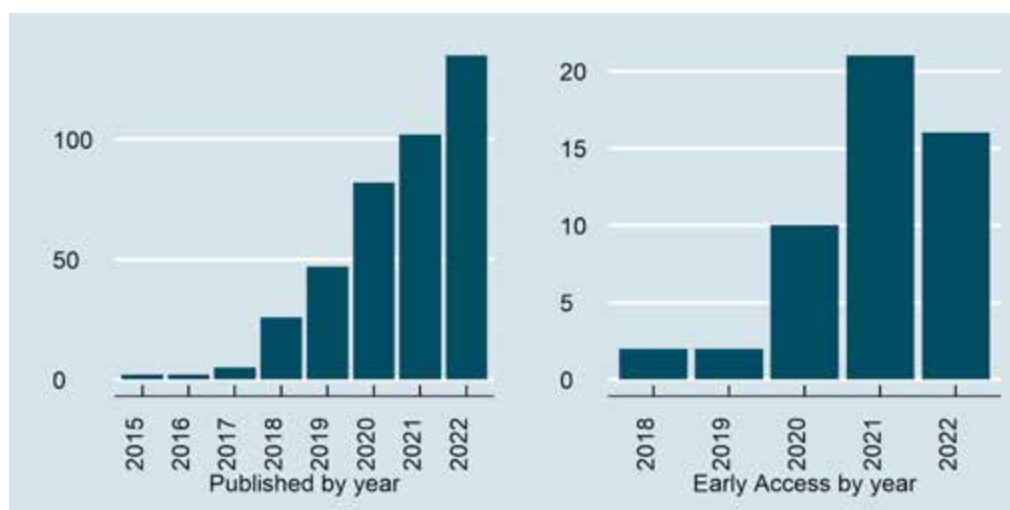

Figure 1. Adult games and DLCs published by year and Early Access apps by year (from all 430 games). 2022 figures only contain games from January to September 4.

43% of developers in the full data have a Patreon page for funding game development. This percentage is likely to be an underestimation as not all developers are using the exact same company name on Steam that they are using on Patreon.

Sales	Porn games sample	Indie games (VG Info 2020)
$4000 or lower	11%	Over 50%
$10000 or lower	17%	Over 2/3
$10000 to $50000	18%	Not given
Over $50000	43%	Almost 1/5
Over $200k	11%	9%
Over $7M	0	1%

Table 1. Games sales in our sample vs indie games in general. Sales estimates from Video Game Insights. The indie game column contains the portion of lifetime revenues. The porn games sample column estimated revenues up to Dec 14, 2022.

Porn games in our sample seem to sell a bit better compared to all indie games but there are no sales over $7M (see table 1). Some of the developers in the sample are also successful on Patreon: DrPinkcake, developer of *Being a DIK, season 2* (DrPinkcake,

2022), has an estimated monthly revenue of $29k–96k and is the 5th most successful adult game developer, and 32nd in all categories measured by the number of funders. On Steam, *Being a DIK*'s estimated revenue is $2.6M with 263k copies sold. *Being a DIK* season 2 DLC has sold a bit over 14k copies. The estimated revenue of *NEKOPARA Vol. 1* (NEKO Works, 2018) is $5.9M with 90k copies which would make it the highest-selling game in the sample. However, the base game contains nudity and sexual jokes and the adult-only content comes with a DLC that needs to be bought separately; we do not have an estimate of only the DLC's sales. The DLC has sold 22k copies. The estimated revenue of *Carnal Instinct* (Team Carnal Instincts, early access) is $1.5M with 68k sold copies.

Pornographic Content

Two of the games in our sample were DLC's which added pornographic content to non-adult base games. 17.5% (CI_{95}=7.5%–28.7%) of games in the 40 games sample contain only nudity. That is even stated in the adult content description on Steam. In this, Steam's policies seem to be less strict than Patreon's (cf. Lankoski, Apperley, and Harviainen 2023).

While full content analysis of pornographic content is outside of the scope of this paper and can be challenging due to the structures of the games (some content is hard to reach), some description of the content is needed. Pornographic content includes oral, vaginal and anal sex, manual stimulation of genitalia with foot/hands, threesome sex, incest, masturbation, urination, domination, non-consensual sex, spanking, group sex, sexual role-play, and bondage. Sex is depicted between a man and a woman, two or more women or two or more men, and a man and a transgender character.

In addition, the games include sex with monsters such as orcs, demons and tentacles. Male/transgender climax is often shown; depiction of female orgasm is rather rare. Some of the games have some choices within sex scenes: e.g., in *College Kings 2: Episode 1* (Undergrad Steve, 2022) in a scene with Chloe offers choices of sex positions, "boobs", "feet", "vaginal", and within "vaginal" choice "tease with kisses" or "finger her".

The sexual acts portrayed in the games are mainly heterosexual. Two of the games, *Hardcore Cruising: A Sci-Fi Gay Sex Cruise!* (Y Press Games 2022) and *NO, THANK YOU!!* (Parade 2018), are focused on homosexual relationships but most of the games portray heterosexual sex or heterosexualized same-sex behaviours, where sexual scenes between two female characters are portrayed in a manner familiar to pornography targeted at heterosexual men (cf. Tibbals 2010). The sample does not include games like *Hardcoded* (in development), created by transgender developers with transgender audiences in mind (cf. KAIJU 2018).

Some of the games include fetish content, like those familiar from hentai, Japanese pornographic animations, such as *futanari* characters, who have feminine bodies, but also male genitalia, (in *Futanari Vampire Girlfriend,* owlyboi 2021), or tentacle penetration (in *Tower and Sword of Succubus,* Libra Heart 2020).

Games also include depictions of and references to sexual violence. The PC in *Beautiful Mystic Defenders* (Fantasize Games 2022) is making references to sexual abuse in his inner dialogue (e.g., "Airi, her drowsy look makes me want to take advantage of her"). The PC in *Depraved Awakenings* (PhillyGames 2019) is repeatedly shown to sexually touch a sleeping female NPC (non-player character), while still recognizing their acts as morally questionable. In *My Cute Roommate* (Astaros3d 2020) similar behaviour is necessary in order to advance in the game towards the goal of having sex with an NPC.

The portion of pornographic content in most games analysed here was fairly small in relation to other content (in comparison to porn videos): in many cases, the player needs to make the right choices (as in solving a puzzle or figuring out the right dialogue choices) in order to reach a sex scene.

The games incorporate pornographic content in three different ways: cut-scenes, user interface, and game mechanics. In *FURRY SEX Cabaret* (Furry Tails 2021), the pornographic content is located in the narrative scenes taking place between the actual gameplay levels. In *Anthophobia* (Terrarium 2020), where the amount of adult content is low this is compensated by including nudity in the game in form of a partial image of the topless PC (player-character) in the user interface as well as with stripping mechanics: the character heals by stripping.

GENRES

Next, we consider the types of games developed. The starting point of the grouping used here has been developers' descriptions of the games and genre tags on Steam. The genres are described with an example or examples of popular mainstream games when possible.

The games in this sample differ based on the kind of gaming capital (Consalvo 2009) they demand. Some are simple puzzles, types of which are common in casual and non-digital forms as well, others demand more familiarity with digital gaming, such as knowledge of how an RPG game is usually played, and others demand even more in-depth knowledge, as some games adhere to Western traditions of keyboard controls and some to e.g., Japanese ones. Even though the simplest puzzle games do not necessarily require skills or knowledge of digital games more broadly, the fact that they are published on Steam means they are attainable for those at least somewhat familiar with digital gaming.
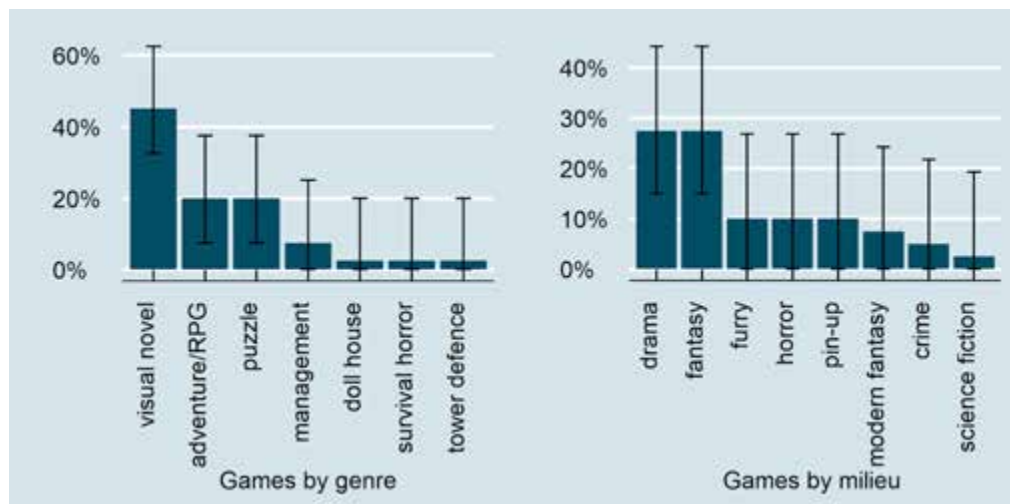

Figure 2: Steam games by genres. Whiskers show multinomial 95% confidence intervals.

Dating sims

Dating sims have been described as "romantic simulation games where the main goal is to find a partner" (Navarro-Remesal and Loriguillo-López 2015), at least partially. On the *Moby Games* database, *Don Juan* (No Man's Land) from 1984 is the oldest game in the dating/romance game group (Moby Game Contributors n.d.). In the game,

an NPC has a "lovometer" starting from zero. "To increase the lovometer's score, the player must enter single keywords (verbs in infinitive). ... Which words are successful depends on the girl's character." (Moby Game Contributors n.d.) Dating sim mechanics in games follow the same logic. Some popular AAA games, such as *Dragon Age: Origins* (Bioware 2009) include dating sim mechanics. In these games, sex scenes are also a part of the progression structure and are rewards for completing goals (cf. Krzywinska 2015).

37.5% (CI$_{95}$=25%–54%) of games in the sample include *dating sim* mechanics but as a secondary genre. For example, *Depraved Awakening* is a visual novel and *Renryuu: Ascension* (Naughty-Netherpunch 2021) is an adventure game/RPG but both include some dating sims mechanics.

Many of these games allow pursuing multiple partners without penalty. A common indicator for this is a "harem" descriptor used in the content description of a game. Harem (ending) terms probably have their roots in Japanese dating sims (cf. Taylor 2007). *Tales From the Unending Void* (Perverteer Games 2022) is an example of "harem" tagged game and in the game, each sexual relationship exists in its own bubble. However, for example, in *Depraved Awakening*, there are cases where telling a female character about having sex with another character leads to losing a score (the score is based on how much the character likes the PC) and affects the outcomes of the player's choices with that character.

Not all games in the sample use dating sim mechanics. For example, in *Beautiful Mystic Defenders* and in puzzle games, sex scenes or pin-up images are rewards for reaching a goal that is not connected to character–character relations. Rape scenes are used in some games as a punishment (or as a reward) for losing a challenge or fight, for example, in *DancingReaper* (WOD 2021) where health reduced to zero leads to a scene where a monster rapes the PC, and after that, the game restarts from the PC's hotel room.

Visual novels

> **Visual novel:** *Focus on story, minimal choice:text ratio, vast majority of choices are dialogue based. (TCMS 2016)*

Visual novels use combinations of images, text, and sometimes videos, to tell a story typically offering some choices on how the story progresses. Choices are made by clicking one alternative and clicking or pressing (typically) the space bar to progress in the story. Some visual novels have a branching narrative structure and some are without any choices that would have a major impact on how the story progresses. (Dillon 2020) Visual novels are popular in Japan but have been rather unknown elsewhere (Navarro-Remesal and Loriguillo-López 2015).

Tales From the Unending Void: Season 1 (Perverteer Games 2022) and *College Kings 2: Episode 1* (Undergrad Steve, 2022) are good examples of a simple *branching narrative* type of visual novel. In the game, you proceed in the story by hitting space or clicking the mouse and occasionally making choices. Choices can be between different dialogue options or actions. Different choices can lead to seeing different scenes. The choices influence what sex scenes the player sees. There is typically no challenge but there can be wrong choices, usually relating to pushing one's luck to advance to sexual acts too fast, which leads to an early end of a scene or other negative consequences.

Being a DIK: Season 2 (DrPinkcake, 2022) and *College Kings 2: Episode 1* (Undergrad Steve, 2022) have some minigames and free-roam parts. Minigames include puzzles (e.g., arrange pieces correctly, find words in the set of letters), memory games (e.g., what option is correct based on what a character said previously) or quick-time event-based (hit correct buttons based on prompts before the time runs out). Free-roam parts allow the player to move around a location and choose which characters in the location to interact with. Free-roam gives more choices to the player in which order the game scenes take place and introduces adventure/RPG-type features in certain parts of the visual novel.

Puzzle

Puzzle games in the sample include a variety of puzzle types. *Hentai Girl* (IR Studio 2020) is built on the arrange-squares puzzle to show a pin-up image. *Sex and the Furry Titty* (Furlough Games 2021) is basically a match-3 puzzle game where after certain conditions are reached in a match-3 game, the story progresses and/or new sex scenes are shown. One popular example of non-adult match-3 games is *Candy Crush Saga* (King, 2012). *Hentai: Memory Leak II* (Crew Lab 2020) is a memory game where the player should repeat a shown pattern to reveal a new pin-up image whereas *Hot Hentai* (LTZinc 2022) is a memory game where players turn two tiles. Turning a tile reveals its colour. If the colours match, tiles disappear, and if not, they are turned back. A pin-up image behind the tiles is revealed. *OnlyFuck 2: Scarlett* (NSFW18 Games 2022) uses multiple different types of puzzle minigames such as Sudoku and Trivia.

Most of the puzzle games in the sample are fairly simple. Adult content is used in them as a reward, but that reward is almost guaranteed, rather than dependent on the player developing their skills over a long period of time.

Adventure game/RPG

In adventure games/RPGs, functional world, exploration, and often puzzle solving have an important role. These games have NPCs that can be interacted with. Often the game world is filled with collectable or manipulatable items that can be used to improve the PC, solve puzzles or open new areas (e.g., keys or levers to open doors). *Leisure Suit Larry in the Land of the Lounge Lizards* (Sierra Online, 1987) is a well-known adventure game (though without point-and-click mechanics) that includes adult themes but no hardcore sex. Adventure games revolve around exploration, finding items and puzzle-solving. Some adventure / RPGs also have character stats and skills that influence play. Character creation is a typical part of RPGs. The stats and skills can be improved. RPGs have a combat system where the outcome of attacks is influenced or determined by stats and skills. *Ultima 1* (Origin Systems 1981) and *The Elders Scrolls V: Skyrim* (Bethesda Game Studios 2011) are examples of non-pornographic RPGs. Adventure games and RPGs are in the same category because the games in the sample contain a mixture of features that makes dividing the games into two categories difficult. For example, character development is not typical of adventure games but is used, for example, in *My Cute Roommate* (Astaros3d 2020). In the game, you can develop stats: for example, going to a gym improves strength, which helps in brawls.

My Cute Roommate is a hybrid of a point-and-click type of adventure game and a visual novel. It uses locations, times, and events to create a more dynamic set-up for choices. The player needs to be in the right location at the right time and needs to have met a set of preconditions to trigger a scene, which can be dialogue with an NPC or a sex scene.

DancingReaper (WOD 2021) is a side-scrolling RPG game. The game has *Castlevania*-type (e.g., *Castlevania: Symphony of the Night,* Nintendo, 1997) combat, jumping and some RPG elements. However, the game is utilizing more adventure/RPG elements compared to *Castlevania*, such as quests, inventory, and character development. In

DancingReaper, losing a fight leads to a rape scene. For a player aiming to see pornographic content, the game directs the player to fail rather than succeed in gameplay, contrary to most of the other games in the sample.

Tower and Sword of Succubus uses an isomorphic game view and movement, exploration, character upgrades, and fighting mechanics that resemble *Legends of Zelda* (1986). One of the PC's attacks is love, which allows the PC to have sex with an enemy, gain health and kill the enemy.

Carnal Instinct is a 3D game with 3rd person-view and the game mechanics are similar to, for example, *The Elders Scroll IV: Oblivion* (Bethesda Game Studios, 2006). The game offers NPCs with whom the player can initialise sex acts instantly, but sex scenes are also rewards for completing some of the quests.

Management
Sim City (Maxis, 1989) is an early, famous management game, where players build a city using resources and try to keep the city dwellers happy. Japanese *Harvest Moon* (Amccus, 1996) combines farm management and dating sim but without the erotic content. *Playboy: The Mansion* (Cyberlore, 2005) is a rare example of a Western AAA management game with erotic content.

Boob Farm (Tender Troupe, early access) is the only management game in the sample and utilises a game mechanic idea similar to *Harvest Moon* but adds hardcore sex scenes. In *Boob Farm,* players manage a farm (harvest resources, build new things to farm) by using resources to convert them to other resources, for example, by planting corn to produce chicken food and then having chicken lay eggs which can be used to create types of food. All resources created then can be sold or used to give tasks to the women on the farm and the tasks then unlock story and/or sex scenes.

Dollhouse
Dollhouses are games where the player can manipulate characters to have sex acts without much other content. *ViRo Playspace* is described on Steam as follows:

> *ViRo Playspace already has several solo experiences available to explore on our Simulator Level, including beautiful women, men, and even fantasy characters. Feel free to walk around the level and purchase solo passive and interactive experiences to try by yourself.*

The game supports, according to developers, VR and various sex toys; the sex toys can be synced with the game content.

Tower Defence
Tower defence games are strategy games where the player is defending their own territory by placing defensive structures, such as turrets, to block enemy advances. *Plant vs Zombies* (PopCap Games 2009) is an example of a popular tower defence game. In the sample, *Beautiful Mystic Defenders* is a tower defence game where between the tower defence sections a simple story is told in cut-scenes and the story segments include sex scenes.

Survival Horror
Anthophobia is a side-scrolling survival horror game. Perron (2004) describes the genre as follows:

*[G]amer has to find clues, gather objects (you cannot do without
keys) and solve puzzles. In order to survive with the weapons he
has (or will come across), the gamer has to face numerous
impure, disgusting, creepy and threatening monsters[.]*

In *Anthophobia*, the PC fights against plant monsters and collects resources such as
ammunition. The PC (a woman) can heal itself by stripping and can wear the clothes
the player finds. In case the PC gets too much damage, or her health reaches zero, the
monsters rape her. In case of death, the game can be continued from the previous
checkpoint.

Mode

Mode refers to the graphical style of a game (King and Krzywinska 2002). In the
following are the modes used in the sampled games.

In terms of style, 25% (CI_{95}=12.5%–42.2%) of games is sample uses photorealistic 3D
rendering in the game, 67.5% (CI_{95}=55.0%–82.6%) cartoon style and 7.5%
(CI_{95}=0.0%–22.5%) uses 3D rendered cartoon style. *Cartoon mode* uses drawn images
and cel animation where each frame of the animated object is drawn separately. *3D
mode* uses 3D models and 3D rendering. *3D/cartoon mode* utilized 3D models and
rendering but instead of going for a photorealistic style, 3D/cartoon mode aims to look
like a cartoon.

Games such as *Depraved Awakening*, *Being a DIK: Season 2*, and *College Kings 2:
Episode 1* (Undergrad Steve, 2022), which are using 3D rendered graphics use third-
party 3D models, such as characters and environmental assets, facial expressions,
poses, and animations from, for example, Raz3D.com. This can be seen in games using
the same locations and the same character models in their scenes. The quality of
graphics and animations is high when developers are using professional 3D assets.
Game development using stock models and animations is a new phenomenon existing
also outside of pornographic games (e.g., *Unity asset store* or *Unreal marketplace)*.

Milieu

Next, we will describe the milieus of adult games. The milieu refers to the fictional
setting of the game (King and Krzywinska 2002).

Drama

The drama category includes games that focus on characters' relationships in
contemporary everyday settings. Drama is a genre that is not typically seen in Western
AAA games as the main aspect of a game. Notably in Japan, dating sims games have
been quite popular (see Taylor 2007).

In *Being a DIK: Season 2*, *My Cute Roommate*, and *College Kings 2: Episode 1* events
of the game take place in college or university. The characters are young adults (over
eighteen) unlike the popular teen drama television series, where the main characters
often are 15 to 18-year-old teens like in *Dawson's Creek*. Popular teen television series
are potential influencers because "the massive international success of series like
Beverly Hills 90210, Dawson's Creek or The *OC* has made the conventions these texts
employ internationally recognisable" (Jenner 2021). On the other hand, university or
high school is also reoccurring setting in Japanese visual novels and games: for
example, *Virgin Roster* (2003), *Amorous Professor Cherry* (2004), *I'm Gonna Nurse*
(2001), and *X-Change* (1997) use this milieu.[1]

Examples of workplace dramas in the sample are *NEKOPARA Vol. 2*[2] and *Booty Farm*.
NEKOPARA Vol. 2 takes place in a bakery where the drama between three sisters is the

core of the story. *Booty Farm* takes place on a farm and the story focuses on relations between the PC (man) and various women.

Games in the drama category sometimes contained humorous traits. *Booty Farm* is a game modelled after popular casual simulation games, such as *Farmville* (Zynga 2009), and sexual acts are located in visual novel-styled sequences between the gameplay. However, the gameplay is accompanied by guidance from a female character in the form of very obvious double entendre lines – or dirty jokes. Combining humour with pornography, and animated pornography, in particular, is not a new phenomenon (e.g., Paasonen 2018). In games, we suspect that it is used to lessen the need for a realistic plot to get to the sex.

Fantasy

The fantasy genre is defined by imaginary or unreal worlds, characters and phenomena, and often includes magic as well as non-human races such as elves, orcs, and supernatural beings (cf. "FANTASY" n.d.). Fantasy is a very common genre in Western games, with popular examples including *The Witcher 3: Wild Hunt* (CD Projekt Red 2015) and the *Warcraft* game series (Blizzard Entertainment 1994-). Fantasy in the sampled games comes in different forms. *Tower and Sword of Succubus* takes place in a medieval-style world where, in addition to humans, creatures such as orcs and the undead live. *Carnal Instinct* draws from Egyptian mythology; the word is inhibited by humans and humanoids with various animal heads derived from historical Egyptian art.

Modern fantasy

The games with the modern fantasy setting are situated in contemporary time but contain magical or fantastical elements. The novel *Harry Potter and the Philosopher's Stone* (Rowling, 1997) and the games based on the Harry Potter book series and films are well-known examples of modern fantasy settings. In the sample, *Champion of Venus* (Umbrelloid, early access) is situated in contemporary times but gods, such as Venus exist. The PC is Venus' champion in a competition between gods. The tone is humorous, potentially to make the nonsensical plot stand out less. *ViRo Playspace* (Virtual Romance LLC 2019) is an adult playground set in a contemporary environment but with some non-human creatures to have sex with.

Furry

Some games are clearly aimed at particular existing audiences by incorporating design elements that are typical to a particular subculture. *FURRY SEX: Cabaret, FURRY GIRL PUZZLE, Hentai Furry* and *Sex and the Furry Titty* were aimed at players familiar with the furry fandom, a subculture focused on anthropomorphic animal characters (Austin 2021). The games consisted of animal characters depicted in the visual style typical of furry fandom. A similar visual style of presenting animal characters can be found in many animated films including Disney's *Zootopia* (2016), and popular games such as *Sly Cooper: Thieves in Time* (Sanzaru Games, 2013). There are also popular comics located in a similar milieu and including sexual content, such as *Blacksad* (2000) by Juan Diaz Canales, or *Inspector Canardo* series (1979-) by Benoît Sokal.

Science fiction

In science fiction games in the sample, some imagined technical innovation has taken place such as intergalactic space travel. The pivotal location of the stories is a spaceship. *Tales From the Unending Void: Season 1* (Perverteer Games 2022) is the only case of a science fiction milieu in the sample. The PC is a nobleman turned into a smuggler and the game follows his adventures around space. Examples of this kind of

science fiction milieu with outcasts as protagonists can be found in the television series *Firefly* (2002) and *Farscape* (1999–2003).

Horror

Central to the horror milieu, according to Carrol (1990), are monsters and disgust.[3] The monsters have features that are disgusting: rotting flesh of zombies, Frankenstein created from pieces of corpses, and vampires bite contaminating and creating new vampires.

In *Anthophobia*, plant infestation and zombies (created from humans by infestation) are taking over the world. The PC is trying to find a safe shelter. Unlike zombie fiction, plants rape people if they catch them.

Witch 2 Hell Adventure (Dark Tales Town 2021) is situated in some other realm filled with demons. The player controls Chelsea, a woman, trapped in that realm and trying to get out. Chelsea can fight demons, ignore them or have sex with them.

In *Red Embrace: Hollywood* (Argent Games 2019) the PC is a newly created vampire trying to make his place in the vampire society. The obvious influences are vampire fiction, such as Anne Rice's *Interview with the Vampire* (1976) and the table-top role-playing game *Vampire: The Masquerade* (Rein-Hagen 1992).

Horror fiction has used erotic imagery, like in the film *The Vampire Lovers* (Ward Baker, 1970) and in *Evil Dead* (Raimi, 1981) where a tree rapes a woman. Tait (2008) argues each 'body genre' [pornography, horror, melodrama, vulgar comedy] acts on the body in different ways, and thus to conflate pornographic and horror spectatorship is to confound different modes of spectatorship and arousal." However, what we see in the sampled horror games is a blend between the modes of spectatorship and arousal of horror and pornography in a similar fashion to the series of lesbian vampire cinema that combines horror and softcore pornography (cf. Heller-Nicholas 2017).[4]

Crime

Crime fiction is fiction revolving around crimes: solving or committing them. Film noir fiction includes crimes (such as murder and blackmail) and is often cruel and erotic. In the world of film noir , cops are corrupt, and a private detective resides both in the domains of law and crime. The film noir often includes a femme fatale: a woman who is desirable but also dangerous (Borde and Chaumeton 1996). *Depraved Awakening* (PhillyGames 2019) builds on these themes but amplifies the erotic dimensions to hard-core pornography. *No Thank You!!!* is a visual novel where the PC gets involved with a business owner/detective who has yakuza after him. The PC is a bisexual male but sex partner options for sex are exclusively male. The story is, again, violent and dark. However, the typical low-key lighting of film noir, which produces strong contrasts and shadows, is not used in either game.

The PCs in crime games represent the archetypal hero of film noir, who is positioned as a loner, with a history of failed relationships and a rather cynical view of women, the police, and society (cf. Horsley 2010, 32–33). Attitudes in the PC's dialogue of *Depraved Awakening* and in *No Thank You!!!* imply that women are not a target group of these games. In *No Thank You!!!* when the PC squeezes another (male) character's butt – without permission – the character gets angry, asks why and after a reply states "You just felt like it? … That's what girls are, anyway.") In *Depraved Awakening*, the PC at the beginning expresses that paid sex is for stress relief: "After a job like that, can't a guy maybe… Well let's say relieve some stress". Later in the game, the PC breaks into an apartment to follow up on a lead and encounters a practically naked sleeping woman. The game offers options on how to search the room but after the

search is finished, the game prompts to focus on the sleeping woman and PC thinks "I don't have time for this…" However, the game prompts options "just feel" and "leave". If "just feel" option is chosen, the player is given the option to squeeze the breasts of the woman. The language the character uses to describe women replicate film noir's hard-boiled detective tropes (cf. Rowland 2010, 117).

Pin-up
Some of the games have minimal fiction components and the backdrop of the games consists of images of naked or scantily dressed women in the style of pin-up images, Playboy centrefolds or tabloid page 3 models. The backdrop images might not come from the same milieu, which prevents the formation of a single coherent milieu; in a sense this category is non-milieu.

DISCUSSION AND CONCLUSIONS
In terms of game development, we observed that a significant portion (43%) of adult games sold on Steam were produced by developers using Patreon to fund them. Many games are also sold as early access. This means that those games are not finished. Perhaps related to this, 3rd-party assets have an essential role in (photorealistic) 3D games in this sample as developers often used models and animations from asset stores (e.g., Raz3d) to expedite or enable the development. Another side of the coin is that the same character, hair models, and locations can be seen in several different games.

The random sample from the games did not contain all genres. Most notably, the sample did not have any games tagged as *sports* or *massively multiplayer* (MMO) genres by the developer. Adult MMOs are rare. *Sociolotron* (2005) is one early example of adult content MMOs, apparently still running with its 2000s 3D game aesthetics. It is no surprise that MMOs are rare among pornographic games because building them is expensive.

Pornographic games utilize various genre conventions and milieu. Most notably, dating sim mechanics are pervasive and there are many games, where fiction focuses on drama; this is a clear difference from non-pornographic games where drama is not typically seen in a major role; the majority of games are classified as action or sports in MobyGames database according to Faisal and Peltoniemi (2018). Also, visual novel is a prominent genre in pornographic games while nearly non-existent in non-pornographic Western games (cf. Faisal and Peltoniemi 2018). Many of the analyzed games were dramas, including three situated in universities/high schools. The storytelling in these games links to the conventions of teen dramas.

The sex represented in most of the games is heterosexual sex or heterosexualized same-sex sex. Lankoski, Apperley, and Harviainen (2023) observed the same in their analysis of Patreon-funded porn games. This is typical in porn videos as well (Tibbals 2010) and we can assume that the porn games repeat the wider conventions of pornography.

Curiously, in two games analyzed, *Anthophobia* and *DancingReaper,* raping the PC when defeated (or rape of some NPC in the background and nudity in *Anthophobia)* is the main pornographic content in the games. Both games have a woman as the PC. Toon monster porn, which also contains forced sex, often by monsters, is also worth noting in this context as a potential reference point (Paasonen 2018). However, this is a strange combination: losing a fight is rewarded with a pornographic scene; at least we assume the pornographic scene is intended as a reward. As such, these games function contrary to the other games in the sample, where sexual content is the reward for succeeding in the game.

The sex acts presented, with the exception of sex with transgender persons, are rather common sexual fantasies, e.g., roughly 90% fantasized about oral sex in Joyal, Cossette and Lapierre's (2015) data. Even forced sex is a somewhat pervasive sexual fantasy: roughly ⅓ fantasized about being forced to have sex and 11% of women and 22% of men fantasized about forcing someone to have sex and having sex with a sleeping/drunk/unconscious person was fantasized by 11% of woman and 22% of men in the data.

Depictions of sexual violence in digital games in the Western market have been scarce and as such a source of public controversies (Pasanen 2017, 48–50) as with the publication of *Custer's Revenge* (cf. Payne and Alilunas 2016) in the 1980s and *Rapelay* in 2009 (cf. DeWinter 2015). However, sexual violence has become a part of modding and machinima cultures possibly through the influence of Japanese game culture (Pasanen 2017, 50). Regular presentations of rape have also been seen in US teen television series (cf. Ryalls 2021) and stalking is represented also in a positive manner in some series such as *You* (2018-).

Finally, based on the pornographic content and the gameplay features, pornographic content functions mainly in three ways in relation to gameplay and game mechanics in the sampled games:

1. Pornographic content is intertwined with the gameplay. For example, it is an integral part of the narrative, which was common in visual novels, or game mechanics.

2. Pornographic content is part of the game's user interface in the form of graphics or tutorial texts.

3. Pornographic content is a reward, located in the cut-scenes or at the end of the game.

These forms are not mutually exclusive but can be found in the same game. Pornographic content can be, for example, part of both the game mechanics and user interface, like in *Anthophobia*, or appear in the user interface and as a reward, as in *Booty Farm*.

BIBLIOGRAPHY

Apperley, Thomas, and Jussi Parikka. 2018. "Platform Studies' Epistemic Threshold." *Games and Culture* 13 (4): 349–69. https://doi.org/10.1177/1555412015616509.

Austin, Jessica Ruth. 2021. *Fan Identities in the Furry Fandom*. New York: Bloomsbury Academic.

Bateman, Chris, and José Zagal. 2018. "Game Design Lineages: Minecraft's Inventory." *ToDigra* 3 (3).

Borde, Raymond, and Etienne Chaumeton. 1996. "Towards a Definition of Film Noir." *Film Noir Reader* 1: 17–25.

Brathwaite, Brenda. 2007. *Sex in Video Games*. Advances in Computer Graphics and Game Development. Boston, Mass: Charles River Media.

Carless, Simon. 2020. "How That Game Sold on Steam, Using the 'NB Number'." 2020. https://newsletter.gamediscover.co/p/how-that-game-sold-on-steam-using.

Carroll, N. 1990. *The Philosophy of Horror: Or, Paradoxes of the Heart*. Taylor & Francis.

Consalvo, Mia. 2009. *Cheating: Gaining Advantage in Videogames*. First MIT Press paperback edition. Cambridge, Mass.: Massachusetts Institute of Technology.

DeWinter, Jennifer. 2015. "Regulating Rape: The Case of RapeLay, Domestic Markets, International Outrage, and Cultural Imperialism." In *Video Game Policy: Production, Distribution, and Consumption*, edited by Steven Conway and Jennifer DeWinter, 244–58. Routledge Advances in Game Studies. New York: Routledge Taylor & Francis Group.

Dillon, Jessica. 2020. "The 10 Best Visual Novels Of All-Time, Ranked According To Steam." TheGamer. February 29, 2020. https://www.thegamer.com/steam-visual-novels-best-ever-ranked/.

Faisal, Ali, and Mirva Peltoniemi. 2018. "Establishing Video Game Genres Using Data-Driven Modeling and Product Databases." *Games and Culture* 13 (1): 20–43. https://doi.org/10.1177/1555412015601541.

"FANTASY." n.d. Lexico Dictionaries | English. Accessed September 17, 2021. https://www.lexico.com/definition/fantasy.

Hart, Casey. 2015. "Sexual Favors: Using Casual Sex as Currency within Videogames." In *Rated M for Mature: Sex and Sexuality in Video Games*, edited by Matthew Wysocki and Evan W. Lauteria, 147–60. New York: Bloomsbury Academic.

Heller-Nicholas, Alexandra. 2017. "Seductive Kindness: Power, Space, and 'Lesbian' Vampires." In *Hospitality, Rape and Consent in Vampire Popular Culture: Letting the Wrong One In*. Cham: Palgrave Mcmillan.

Horsley, Lee. 2010. "From Sherlock Holmes to the Present." In *A Companion to Crime Fiction*, edited by Lee Horsley and Charles J. Rzepka. Blackwell Companions to Literature and Culture 66. Chichester, U.K. Malden, MA: Wiley-Blackwell.

Jenner, Mareike. 2021. "Transnationalising Genre: Sex Education and How To Sell Drugs Online (Fast)." In *Binge-Watching and Contemporary Television Studies*, edited by Mareike Jenner. Edinburgh: Edinburgh University Press.

Joyal, Christian C., Amélie Cossette, and Vanessa Lapierre. 2015. "What Exactly Is an Unusual Sexual Fantasy?" *The Journal of Sexual Medicine* 12 (2): 328–40. https://doi.org/10.1111/jsm.12734.

KAIJU. 2018. "Digital Diversity – Hardcoded (Explicit)." *EnbyKaiju* (blog). October 18, 2018. https://enbykaiju.com/2018/10/18/digital-diversity-hardcoded-explicit/.

King, Geoff, and Tanya Krzywinska. 2002. "Introduction." In *Screenplay: Cinema/Videogames/Interfaces*, edited by Geoff King and Tanya Krzywinska, 1–32. London: Wallflower.

Krzywinska, Tanya. 2015. "The Strange Case of the Misappearance of Sex in Videogames." In *Rated M for Mature: Sex and Sexuality in Video Games*, edited by Matthew Wysocki and Evan W. Lauteria. New York: Bloomsbury.

Lankoski, Petri, Thomas Apperley, and J. Tuomas Harviainen. 2023. "Platform-Produced Heteronormativity: A Content Analysis of Adult Videogames on Patreon." *Games and Culture* 18 (1): 102–23. https://doi.org/10.1177/15554120221084453.

Lankoski, Petri, and Mikolaj Dymek. 2020. "Patreon and Porn Games: Crowdfunding Games, Reward Categories and Backstage Passes." In *DiGRA'20 – Proceedings of the 2020 DiGRA International Conference: Play Everywhere*. Tampere: DiGRA.

McKee, Alan, Paul Byron, Katerina Litsou, and Roger Ingham. 2020. "An Interdisciplinary Definition of Pornography: Results from a Global Delphi Panel." *Archives of Sexual Behavior* 49 (3): 1085–91. https://doi.org/10.1007/s10508-019-01554-4.

Moby Game Contributors. n.d. "Don Juan (1984)." MobyGames. Accessed February 17, 2021. https://www.mobygames.com/game/don-juan.

Navarro-Remesal, Victor, and Antonio Loriguillo-López. 2015. "What Makes Gêmu Different? A Look at the Distinctive De- Sign Traits of Japanese Video Games and Their Place in the Japanese Media Mix." *Journal of Games Criticism* 2 (1).

Orland, Kyle. 2018. "The First '100% Uncensored' Adult Game Has Been Approved for Steam Release." Ars Technica. November 9, 2018. https://arstechnica.com/gaming/2018/09/uncensored-sexual-games-now-getting-approved-for-steam-release/.

Paasonen, Susanna. 2018. "The Affective and Affectless Bodies of Monster Toon Porn." In *Sex in the Digital Age*, edited by Paul G. Nixon and Isabel K. Düsterhöft, 10–24. Sexualities in Society. London ; New York: Routledge, Taylor & Francis Group.

Pasanen, Tero. 2017. "Beyond the Pale: Gaming Controversies and Moral Panics as Rites of Passage." PhD, Jyväskylä: University of Jyväskylä. http://urn.fi/URN:ISBN:978-951-39-7152-6.

Passmore, Cale, Sabine Harrer, and Katta Spiel. 2020. "Between Pleasure and Power: Game Design Patterns In Clickbait Ludoporn." In *DiGRA'20 – Proceedings of the 2020 DiGRA International Conference: Play Everywhere*. http://www.digra.org/wp-content/uploads/digital-library/DiGRA_2020_paper_363.pdf.

Payne, Matthew Thomas, and Peter Alilunas. 2016. "Regulating the Desire Machine: *Custer's Revenge* and 8-Bit Atari Porn Video Games." *Television & New Media* 17 (1): 80–96. https://doi.org/10.1177/1527476415601212.

Perron, Bernard. 2004. "Sign of a Threat: The Effects of Warning Systems in Survival Horror Games." In COSIG'04. University of Split (Croatia). http://www.cosignconference.org/downloads/papers/perron_cosign_2004.pdf.

Rein-Hagen, M. 1992. *Vampire: The Masquarade*. Stone Mountain: White Wolf.

Rowland, Susan. 2010. "The 'Classical' Model of the Golden Age." In *A Companion to Crime Fiction*, edited by Lee Horsley and Charles J. Rzepka. Blackwell Companions to Literature and Culture 66. Chichester, U.K. Malden, MA: Wiley-Blackwell.

Ryalls, Emily D. 2021. "Representing Rape Culture on Teen Television." *Popular Communication* 19 (1): 1–13. https://doi.org/10.1080/15405702.2020.1868044.

Tait, Sue. 2008. "Pornographies of Violence? Internet Spectatorship on Body Horror." *Critical Studies in Media Communication* 25 (1): 91–111. https://doi.org/10.1080/15295030701851148.

Taylor, Emily. 2007. "Dating-Simulation Games: Leisure and Gaming of Japanese Youth Culture." *Southeast Review of Asian Studies* 29.

TCMS. 2016. "[READ ME] Game Uploading Rules [2019-06-25]." F95zone. 2016. https://f95zone.to/threads/game-uploading-rules-2019-06-25.524/.

Tibbals, Chauntelle Anne. 2010. "From The Devil in Miss Jones to DMJ6 — Power, Inequality, and Consistency in the Content of US Adult Films." *Sexualities* 13 (5): 625–44. https://doi.org/10.1177/1363460710376493.

VG Info. 2020. "Infographic: Indie Game Revenues on Steam." Video Game Insights. 2020. https://vginsights.com.

Waern, Annika. 2011. "'I'm in Love with Someone That Doesn't Exist!' Bleed in the Context of a Computer Game." *Journal of Gaming & Virtual Worlds* 3 (3): 239–57. https://doi.org/10.1386/jgvw.3.3.239_1.

Ware, Nicholas. 2015. "Iterative Romance and Button-Maching Sex." In *Rated M for Mature: Sex and Sexuality in Video Games*, edited by Matthew Wysocki and Evan W. Lauteria. New York: Bloomsbury Academic.

APPENDIX: GAME SAMPLE

Name	Developer	Released	Genre	Setting	Sex
Crypto Girls [18+] - SEXCoin	Pirates Of The Digital Sea	2021	visual novel	drama	explicit
Hentai Furry	IR Studio	2020	puzzle	pin-up	nudity
GLASS	IR Studio	2020	puzzle	pin-up	explicit
DancingReaper	WOD	2021	adventure/RPG	fantasy	explicit
Lewd Island - Season 1	xRed Games	2021	visual novel	drama	explicit
Futanari Vampire Girlfriend	owlyboi	2021	visual novel	horror	explicit
BOOBS SAGA: Prepare To Hentai Edition	Boobs dev	2020	adventure/RPG	fantasy	explicit
Hentai Girl	GirlGames	2018	puzzle	pin-up	nudity
Sex and the Furry Titty	Furlough Games	2021	puzzle	drama	explicit
College Kings 2 - Episode 1 Deluxe Edition	Undergrad Steve	2022	visual novel	drama	explicit
Hentai: Memory leak II	Crew Lab	2020	puzzle	fantasy	nudity
Anthophobia	Terrarium	2020	survival horror	horror	explicit
FURRY SEX: Cabaret	Furry Tails	2021	visual novel	drama	explicit
Femdom Waifu	Zee Vital	2019	visual novel	drama	nudity
NEKOPARA Vol. 2 - 18+ Adult Only Content	NEKO WORKs	2018	visual novel	drama	explicit
FURRY GIRL PUZZLE	AFBIK Studio	2019	puzzle	pin-up	explicit
OnlyFuck 2: Scarlett	NSFW18 Games	2022	management	drama	explicit
Champion of Venus	Umbrelloid	2022	visual novel	modern fantasy	explicit

Tales From the Unending Void: Season 1	Perverteer Games	2022	visual novel	science fiction	explicit
Witch 2 Hell Adventure	Dark Tales Town	2021	adventure/RPG	horror	explicit
Red Embrace: Hollywood	Argent Games	2019	visual novel	horror	explicit
Carnal Instinct	Team Carnal Instinct	2021	adventure/RPG	fantasy	explicit
NEKOPARA Vol. 1	NEKO WORKs	2018	visual novel	drama	nudity
Tower and Sword of Succubus	Libra Heart	2020	adventure/RPG	fantasy	explicit
My Cute Roommate	Astaros3d	2020	adventure/RPG	drama	explicit
Manor of Mystic Courtesans	Nineâ Graphics	2020	visual novel	fantasy	explicit
Hot Hentai	LTZinc	2022	puzzle	pin-up	nudity
Beautiful Mystic Defenders	Fantasize Games	2022	tower defence	fantasy	explicit
Club Hentai: Girls, Love, Sex	WOOP MEDIA	2021	management	drama	explicit
ViRo Playspace	Virtual Romance LLC	2019	doll house	modern fantasy	explicit
Hardcore Cruising: A Sci-Fi Gay Sex Cruise!	Y Press Games	2022	visual novel	modern fantasy	explicit
Booty Calls	3X Entertainment Limited	2018	puzzle	pin-up	explicit
Leap of Love	Andrealphus Games	2020	visual novel	fantasy	explicit
Booty Farm	Tender Troupe	2022	management	drama	explicit
NO, THANK YOU!!!	parade	2018	visual novel	crime	explicit
Renryuu: Ascension	Naughty-Netherpunch	2021	adventure/RPG	fantasy	nudity
Void's Calling ep. 2	Novel	2021	visual novel	fantasy	explicit
Depraved Awakening	PhillyGames	2019	visual novel	crime	explicit

Being a DIK - Season 2	Dr PinkCake	2022	visual novel	drama	explicit
King of Kinks	DPH Studio	2022	adventure/RPG	fantasy	explicit

ENDNOTES

[1] These games have been translated to English and are available via JList.

[2] *NEKOPARA Vol. 2* has an adult-only DLC. While the base game itself is not an adult game nor contains sexual content, adding the DLC makes it an adult content game.

[3] Fear is a typical emotion when engaging a horror fiction but so it is with suspense films, so fear is not distinct feature of horror (Carroll 1990).

[4] There are some hardcore porn movies with monsters such as *The Bargain* (2021).