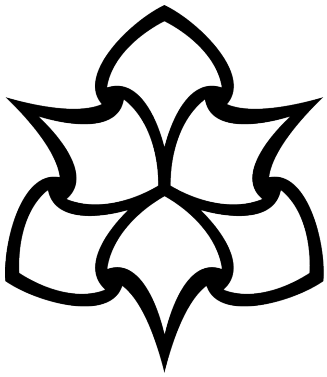

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Games as Authorial Platforms? An Exploration of the Legal Status of User-Created Content from Digital Games

Gabriele Aroni[1]

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Abstract
Digital games can be considered as composed of two main components: the props, i.e. visual, textual, and aural elements such as codes, 3D models and animations; and the form, specially the interaction between players and games, the act of playing itself. This dichotomy thus begs the question whether digital games are indeed games if nobody plays them, and ultimately: who is the owner of the gameplay and any by-product of the interaction between the game and the players? This paper explores the copyright status of content created by users with digital games, such as gameplay videos and images, for example art based on digital game assets, namely virtual photography; as well as customized in-game objects. Many modern digital games offer considerable freedom to players, in terms of how the action on screen evolves and the visual outcomes that the game can produce. Scholars have asserted that digital games avatars, the characters created in games, should be considered a joint work between players and the game developers and some game companies allow the commercial use of videos created from their games. Conversely, other companies expressly prohibit such use, and issue DMCA takedown notices to infringers. Attention will be devoted to specific games as authorial tools, such as *SpaceEngine* and *Townscaper*, where there are neither objectives nor challenges, but they are rather tools that enable players' creativity.

Keywords Games · Copyright · User-created · Digital · Authorship · Media

✉ Gabriele Aroni
g.aroni@mmu.ac.uk

[1] School of Digital Arts, Manchester Metropolitan University, 14 Higher Chatham Street, M15 6ED Manchester, UK

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1 Introduction

When we think of digital authorial tools, we might at first think of word processors for writing text, or graphic editing software to create and manipulate images. These software come with a series of tools to aid users to create their intended works, from different fonts and colors in Word, to advanced filters and brushes in Photoshop. We would hardly consider the pen and paper the writer of any novel, nor the brush and pigment the painter of any masterpiece, and likely, the same applies to their software counterparts, as it would be hard to argue that the word processor I am typing this article on is the author rather than myself – although with the development of pseudo-AIs similar claims might come rather soon. It is indeed telling how the term "authoring" is to be found more commonly that "authorship" as far as new media are concerned [1].

The idea that the software is more than just a tool that creators use, is mainly due to the usual higher level of automation that it affords compared to entirely manual, analog tools. There is nothing new in this claim, as the discussion of how much artistic merit there is in something actually *made* by a machine dates back to the introduction of the photographic camera in the 19th century [2]. Now that photography is safely in the list of the "high" arts together with film, it is not just time to look at digital games and whether they can be allowed in the same list, as the matter is relatively settled [3–5], but to look at whether what users make *from* digital games can have any value independent from the original work and to what extent.

In order to discuss the matter, it is first worth looking at what games are made of from a technical and legal point of view, what they allow players to do, and what the latter can create with them.

2 Props and Form

For the purpose of this analysis, we can argue that digital games are composed of two main parts: the *props* and the *form*. The props are the actual "physical" components of games, such as the code, 3D models, music and sound, animations, and all other components that can, digitally or otherwise, be observed, heard, read, and copied, whereas the form is the actual performance of playing, the interaction between players and the games' props.

Naturally, the props are the most straightforward part when it comes to copyright and ownership. The 3D model of a character, for instance, is obviously the property of its author, and copying and using it without permission is a rather clean-cut case of copyright violation. In Canada, the code of a game is considered a "literary work" and protected as such under the *Copyright Act* [6]. In China, the *Guidelines for the Trial of Copyright Infringement Cases* cover digital games props such as animation, maps, and characters under Articles 14 and 15 [7]. In Japan, the Supreme Court has stated that digital games should be protected as cinematographic works [8]. In fact, there are plenty of online marketplaces where props of any type are sold, from sound effects, to texture images, to animation and code. The other part, and the one that arguably makes digital games *games*, is the form, the actual act of playing, the interaction

between players and the props. This is a more ephemeral component, harder to define specifically, and especially harder as regards determining its ownership. Interactivity is naturally the most defining element of digital games, but hardly the only one.

Prop Theory argues that digital games share similarities with other arts and media, such as film and painting. As a mainly visual medium, digital games are a representative art made of props that evoke in the viewers the desired imagery and feelings, for as much as the pigment on a canvas can compose any scene, the same can be said for pixels on a screen [9]. Philosopher Grant Tavinor for instance, considers the artistic status of digital games intrinsically linked to their visual aspect. Players are attracted to digital games in the same way art appreciators are attracted to traditional art, for in his opinion games "have perceptual and formal structures that are the object of an aesthetic and interpretive engagement in much the same way as other artworks" [4: 174] as well as employing "much of the same aesthetic vocabulary" [4: 180].

Form, due to its more ephemeral nature, is harder to define and copyright. For instance, the system of interactions between players and games are usually "not considered copyrightable subject matter, because courts recognize mechanics as ideas rather than expression." [10: 1254] Form Theory advocates for the uniqueness of digital games due to their interactive nature, and rather compares them to other forms of art and media, arguing that they are closer to performing arts and sports. Graeme Kirkpatrick considers digital games to be analogous to dance performances. Since games cannot be experienced as games unless played, their defining element is the physical relationship between the player and the controller, and the resulting performance, more so than any other components, including video and audio [11: 88]. Katherine Isbister instead compares digital games to sport performances, since the activation of the "reward-related mesolimbic neural circuits" [12: 23] is more prominent in players actually playing a game, rather than watching it passively, as is the case in sport watching.

Since the inception of the discipline of Game Studies in the early 2000s, the importance of one element compared to the other has been the subject of fierce discussions, whereby the *ludologists* supported the supremacy of gameplay and interaction, the form [13, 14], whereas the *narratologists* championed for the fundamental relevance of story and characters [15, 16]. As the studies of digital games became more established and managed to separate themselves from the contiguous film and media studies, the quarrel died down in favor of a middle ground, but the discussion is still alive [17], and especially, is relevant to the matter at hand. If we assume that the act of playing a digital game, its form, is essential in defining the actual existence of the game qua game, and not just an assemblage of props, should the by-products of playing a game be considered separately from the game itself and the assets that compose it?

3 Digital Games and Copyright

Copyright cases related to digital games exist since the beginning of the medium. Indeed, *Pac-Man* [18], one of the first games to achieve worldwide popularity and bring the medium to the mass market, was the subject of a lawsuit from its Japanese developer Atari against North American Philips Consumer Electronics Corp. and Park Television, just two years after its release. Atari argued that the game *K.C. Munchkin* [19] copied *Pac-Man* in its mechanics and look. *Pac-Man* is an arcade game where players navigate a maze with the now iconic yellow round character, while eating dots and evading ghosts that infest the maze. The game takes place on a single screen, where the mazes change as players advance through the levels, with a "wrap-around" mechanic whereby moving all the way to an edge of the screen will have the player character reappear on the opposite side. The sentence of the United States Seventh District Court of Appeal is notable as it considered the defendant guilty of copyright infringement only concerning the "concrete" components of the game, such as video and audio. Game mechanics, or "standard game devices" as they are referred to in the court case, such as the use of dots for points or the wrap-around mechanic, were considered not copyrightable [20]. In short, the props were considered protected by copyright, whereas the form was not. The same year, another court awarded copyright protection to the audiovisual part "displayed during the actual play of the game" [21: 872] of the game *Defender* [22].

It is worth opening a parenthesis here on the technological evolution of digital games from the 1980s to today. Not so much for historical reasons, but rather because it is strictly related to the issue at hand, namely as regards what it is possible to create out of a digital game. Games such as the aforementioned *Pac-Man* were simplistic in their visual apparatus, and especially in the possible outcomes that players could visualize on screen. The titular *Pac-Man* can move in four directions at the player's discretion, which, technically, allows for an almost infinite number of combinations, but the visual result will always be rather similar: the view is fixed to a top-down, 2D representation of the maze on a single screen. Regardless of the skill and choices the players make during the game, it would be hard to argue that any visible outcome from the gameplay would have a sufficient degree of originality to characterize it as a derivative work. Indeed, the issue was already raised in 1983 in a court case related to the game *Galaxian* [23] (see Fig. 1), where the United States Court of Appeal, Seventh Circuit posed the question:

> the particular sequence of images that appears on the screen of a video game machine when the game is played is not the same work as the set of images stored in the machine's circuit boards. The person playing the game can vary the order in which the stored images appear on the screen by moving the machine's control lever. That makes playing a video game a little like arranging words in a dictionary into sentences or paints on a palette into a painting. The question is whether the creative effort in playing a video game is enough like writing or painting to make each performance of a video game the work of the player and not the game's inventor [24: 1012].

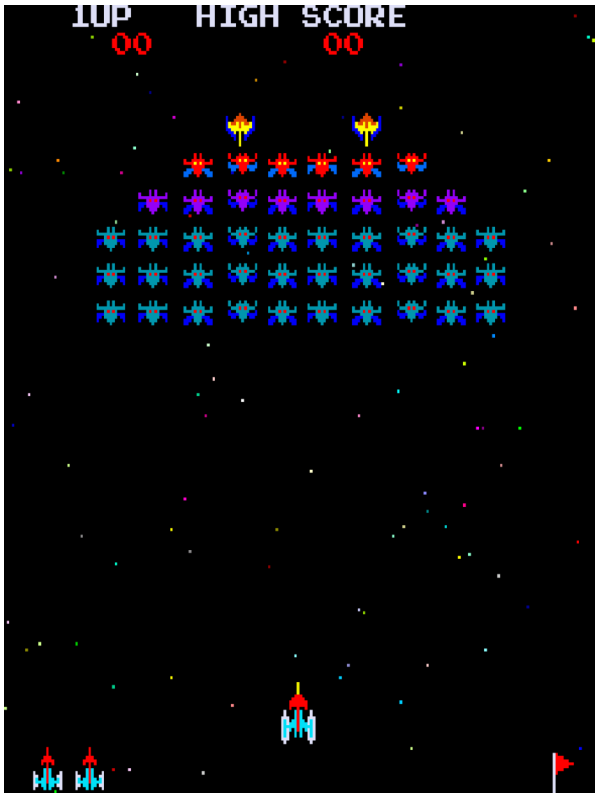

Fig. 1 A screenshot from the arcade version of the game *Galaxian* © Namco 1979 [23]

It is worth noting that *Galaxian* offers a limited array of visual possibilities. Like *Pac-Man*, the whole game is limited to one screen with a fixed point of view, there is no scrolling or transitions to different locales. Players control a spaceship at the bottom of the screen, which can move only on the horizontal axis, and shoot formations of aliens coming down from the top of the screen in a series of levels of increasing difficulty. Despite being one of the first games to use RGB color graphics, which allowed for more colors to be displayed on screen at the same time, the visual aspect of *Galaxian* is rather simple. In general, when we look at early digital games from the 1970 and 1980s, we can see how the geometric forms that represent the various objects on screen, such as the spaceship and aliens of *Galaxian*, while having silhouettes resembling what they are expected to depict, are more symbols which require some interpretation on the part of players to be understood, rather than proper iconic signs which are direct representations of their referent. Based on the limits of the visual representation the game is capable of, the court reached the following conclusion in 1982:

> Playing a video game is more like changing channels on a television than it is like writing a novel or painting a picture. The player of a video game does not have control over the sequence of images that appears on the video game screen. He cannot create any sequence he wants out of the images stored on the

> game's circuit boards. The most he can do is choose one of the limited number of sequences the game allows him to choose. He is unlike a writer or a painter because the video game in effect writes the sentences and paints the painting for him; he merely chooses one of the sentences stored in its memory, one of the paintings stored in its collection [21: 1013].

With the advancement of digital games technology, their visual representation has become more realistic [25], moving from symbols to more readily understandable iconic signs. The Seventh Circuit Court conclusion is an important one for the matter at hand, because it establishes that a certain degree of freedom must be allowed to players in order to create an original work from a digital game, a possibility not allowed by *Galaxian* nor many other games from the same era. Indeed, legal scholar Kyle Coogan affirms that if courts were to revisit these decisions today, they would consider the affordances of modern games worthy of being considered an original work of authorship [26: 402].

3.1 What About the Performance?

If instead of looking at the game *props*, we consider the *form*, useful precedents of the portrayal of gameplay can be drawn from sport performances. In the United States case *Baltimore Orioles v. Major League Baseball Players Ass'n*, the baseball club Baltimore Orioles argued that their players' performances recordings are exclusive copyright of the clubs, as players are considered to be hired by the clubs specifically to create the performances during the baseball matches [27: 667]. The Player Association responded that the players themselves have a right to their own performances, and especially a right to the commercial value that they produce while playing baseball. The court agreed with the club, finding that both the recordings and the underlying performances were copyrightable, the latter due to the "great commercial value" [27: 669] of the performances. However, the judgment itself expresses doubts regarding the originality of a sport performance [27: 676], and indeed the statement that players' sport performances can be copyrighted attracted criticism. In fact, subsequently in *NBA v. Motorola*, Judge Winter said that "sports events are not "authored" in any common sense of the word" [28: 846] and that copyrighting any performance would be detrimental to the competition.

Contrary to a traditional author who has complete control over his work, athletes in a competitive environment might be considered as to "merely attempt a complicated maneuver in the hope that it furthers their ultimate goal of victory" [29: 119], however, if these constraints lead ultimately to a non-original result is debatable. Holden and Shuster argue that, while it is indeed necessary to create some sort of recording – a fixation – in order to be able to claim copyright, this is a separate requirement, and "does not foreclose the possibility that playing a game includes creativity." [30: 973] So, players' performance, the form, might be considered original enough to create something out of a digital game that can be copyrighted, provided it is fixated in another medium. However, this begs the question as to what kind of work is one produced from an existing digital game. The assets, in terms of code, animation, music, etc. – the props – are all created by the game developers, artists,

and programmers, and subject to the usual copyright that these elements entail. Their "rearrangement" so to speak, on part of players is going to be a new work based on an existing one. Indeed, various courts in the United States have reached different conclusions regarding what is copyright protected as regards the images displayed on-screen in digital games, and whereto the developers' copyright extends, and "it is questionable whether they have fixed every gameplay variation possible within their game." [30: 975–976].

4 Derivative Work

Creating work stemming from other media is a rather normal practice that can be found in several arts. Naturally, this practice does not always sit well with the creators of the original works, and as such several high profile copyright cases surfaced over the years. As digital games are composed of several different elements, from literary to visual, it helps to briefly look at relevant cases in other media. In 2007, J.K. Rowling, the author of the famous literary and movie franchise *Harry Potter* filed a lawsuit against the *Harry Potter Lexicon*, the printed book version of the homonym fan website which consisted of a reference book on the lore of the *Harry Potter* world. The lawsuit was brought forth on the premise that a similar book was in the works by Rowling herself. The court ruled in favour of Rowling, forcing the publisher of the *Harry Potter Lexicon* to amend the book [31]. In this case, the medium is the same, both the *Harry Potter* series and the *Harry Potter Lexicon* are books, but it is nevertheless interesting to note how far the rights of the original author of the material extend.

In the visual arts, two cases are most relevant to digital games. American artist Jeff Koons was sued by photographer Art Rogers over the use of one of his pictures as the basis of a sculpture from Koons' *Banality* series. Relevant to works derived from digital games, there is a change of medium in this case, from photography to sculpture. Koons' defense team argued that the derivative work was allowed on the grounds of being a parody of the original. However, the judge argued, a clear reference to the original work must be made for a derivative work to be considered a parody, which Koons' *Banality* failed to achieve [32]. Interestingly enough, Koons argued how he took the photograph "to another vocabulary" [33: 60], underlining how changing the medium from photography to sculpture was enough to consider it an entirely different work.

The other case involves photographer Patrick Cariou and painter Richard Prince. In *Cariou v. Prince* [34], the latter used Cariou's photograph from the collection *Yes Rasta* in his work *Canal Zone*, where he depicted a post-apocalyptic enclave using brush techniques inspired by de Kooning's paintings. Unlike Koons's defense, which relied on the right to satire, Prince argued that it was his right as an artist to use other works as a base for his own, granted that they were different in expressive techniques and purpose from the originals. The Court of Appeal reversed the initial judgment, and concluded that all but five of Prince's works made fair use of Cariou's photographs, as they were transformative enough compared to the original artwork.

Similarly, Jeff Koons won a case in 2006, where it was argued that his work was original enough from the original photo [35].

All cases, literary and visual, outline an important aspect of derivative work, the one of originality, the question is whether the derivative work is *transformative* enough to be considered a new work in itself. Which brings us back to the question if derivative works from digital games, specifically videos and still images, can be considered transformative enough compared to the source material, especially visually. Indeed, there is always a transformation from one medium to another: from a digital game to a video or picture, and, most importantly, the most defining component of a digital game is removed from a derivate work, the one of interactivity.

5 Games as Authorial Tools

5.1 Terms of Service

Whenever players install or play a game on any of their systems, they agree with the End User Licence Agreement (EULA) and/or with Terms of Service agreements (ToS) which state what they are and what they are not allowed to do with the software. This aspect is particularly relevant for the analysis at hand, since it is well established that authorial software users, such as design software, are considered licensees, rather than actual owners of the software they use, which brings notable use restrictions [36].

Notably, several developers have sections of their EULA or ToS about user-created content from their games. Electronic Arts, the largest Western game publisher, states that it "does not object to fair uses of video footage or screenshots on video sharing sites, including YouTube channels that are commercialized, as long as the footage is a version of the game that we have released to the public." [37]. Riot Games, the developers of the popular online game *League of Legends* [38], explicitly forbid derivative works in their EULA [39], but they provide a dedicated page, aptly called *Legal Jibber Jabber*, where they explain to players what and how they can use their intellectual properties. Interestingly, they grant a non-commercial licence for derivative work, and even allow for revenue from passive advertisement and subscription for streaming [40]. Epic Games, developers of one of the most popular games in the world, the online shooter *Fortnite* [41], enact a similar policy in allowing players to create derivative work for non-commercial use, and they allow monetization through revenue from video platforms. Both companies also put limits on what kind of derivative works can be produced from their games. Riot Games state that they "reserve the right to deny anyone the use of our IP at any time, for any reason or no reason, including when we decide, in our sole and absolute discretion, that you are using our IP inappropriately." [40] While Epic Games policy is such that "[a]ll Fan Content must be appropriate for the audience of the Epic IP and consistent with the spirit and tone of the Epic IP (as determined by Epic)." [42].

In Japan "[s]ince video games are protected as cinematographic work, recording video gameplay and uploading videos of gameplay are actions considered copyright infringement." [43: 222] Moreover, this applies to live streaming as well. Nintendo,

for instance, allows the monetization of videos portraying their games through live streaming or pre-recorded sessions, on the condition that the advertisement profits are shared between the player, the video provider, and Nintendo [43: 228].

5.2 Commons Licenses

It is worth opening a parenthesis on the use of Creative Commons licenses for user-generated content. Creative Commons licenses are standardized licenses that creators can use to distribute their work, deciding what can be done with it by the user [44]. Game authors as well as users who create their own content based on games can decide to distribute their works under one of the Creative Commons licenses, allowing a variety of forms of use, from complete release in the public domain, to more restrictive use, for instance prohibiting commercial use. However, unless specified by the creators, any work "fixed" in any medium, is *de jure* subject to copyright, at least under EU [45] and USA [46] jurisdictions. As such, for a derivative work from a digital game to be released under a Creative Commons license, the creator of said work needs to be entitled to do so by either express consent of the game author, or if the work produced is deemed deserving of its own copyright protection first, which brings us back to our main question.

Indeed, there are examples of digital games released under Creative Commons licenses. The remake of 1992 classic *Star Control II* [47], called *The Ur-Quan Masters* [48], makes all assets available under Creative Commons license CC BY-NC-SA 2.5, prohibiting their commercial use, while the software is distributed under the GNU General Public License [49], which allows its free distribution on the condition that any derivative work is distributed under the same license. More recently, *The Last Door*'s [50] developer The Game Kitchen released the graphical assets of their game under Creative Commons Attribution 4.0 license [51], allowing for commercial use as well, including the creation of other games.

In these cases, the possibilities awarded to creators of derivative works are clearly stated in the licenses, not unlike the EULA and ToS discussed infra, and as such the question of what kind of derivative work from games can be considered copyrightable and under what terms remains open.

5.3 It Is Not Just the Gameplay

A preamble is necessary to point out how the amount of interaction that a game allows is not directly proportional to the possible visual outcomes it affords. For instance, strategy games such as *StarCraft* [52], while they afford a large amount of tactics and options to players, in terms of how to execute commands and when, always result in relatively similar visual outputs on screen. This is due mainly to the fixed bird's eye point of view, which does not allow players to manipulate the camera except for panning over the map. Players are thus free to play the game as they wish, so much so that *StarCraft* is one of the most popular competitive games since its release in 1998, with international championships still held today and followed by millions of fans. Players' interaction with the game and other players are thus going to be massively different from one another. Professional *StarCraft* players can perform hundreds of

Fig. 2 A screenshot from the Remastered edition of the game *StarCraft* © Blizzard 2017 [53]. A still image from the game will not look radically different regardless of how it is played

actions per minute and enact complex tactics, not unlike a professional sport player, but to a casual onlooker – or even to an expert one, in the case of a still image – the visual result is going to be hardly dissimilar from the gameplay of a novice who never played the game before (see Fig. 2). In these cases, it is harder to argue for any kind of derivative or original visual work stemming from such games, despite the originality of the gameplay itself.

The same conclusion can be reached for games, or parts of games, where the visual outputs are varied, but there is little input from players to determine their outcomes. For instance, any *cutscene*, part of games akin to movies, where, despite often being rendered with the same engine as the rest of the game and being implemented seamlessly into it, players have no agency at all, or *quick time events*, where players have very limited agency in what is displayed on screen in terms of actions and very little in terms of visuals. To wit, even in a frantic action game such as *Ace Combat 7* [54], where players can freely fly planes in a 3D environment, a still from a cutscene will look exactly the same to every player, regardless of what they do in the interactive portions of the game (see Fig. 3).

In this regard, Legal scholar W. Joss Nichols affirms that "any portion of a game that is capable of displaying a predetermined series of images and that, although triggered by the user, progresses independently of a user's input, should be considered fixed for the purposes of qualifying a portion of a game as an audiovisual work owned exclusively by the game manufacturer." [29: 116] Indeed, in games where plotline and storytelling take a front seat compared to the gameplay, producing video recordings of them, despite eliminating the interactive aspect, can bring the rightsholders of the game to contest that "to the extent that games are played for their plotlines, watching games be played may replace their entertainment value." [26: 398–399].

Fig. 3 A screenshot from a cutscene in the game *Ace Combat 7* © Bandai Namco 2019 [54]. This particular scene will be exactly the same for every player

5.4 Little Play, Lots of Possibilities

Conversely, there can be games where players are afforded relatively little elements of gameplay and interaction, but that can nevertheless produce innumerable visual results. *Townscaper* [55] is city builder game developed by Oskar Stålberg, which, in the author's own words is "[m]ore of a toy than a game". Indeed, both *Townscaper* and *SpaceEngine*, which will be discussed shortly, push the boundaries of what can be defined a "game", rather than an interactive application, as they are both devoid of specific objectives and challenges. However, they are distributed through the digital delivery game platform *Steam* and presented as games, and arguably perceived as such by the users. In fact, it is precisely because they are distributed as games despite having authoring software characteristics, that these two case studies are relevant to the present discussion.

In *Townscaper*, players are presented with an empty sea, and are able to create blocks of a picturesque town simply by dropping them on the irregular grid (see Fig. 4). Aside from adding and removing blocks and choosing their colors, players have no other agency on the game world. It is also possible to move the camera freely and change the time of the day which modifies the light conditions. Such simple premises allow however for a practically endless number of possible iterations. *Townscaper* was a success, and players have been sharing their creations in the form of *screenshots*, still images, online, also prompted by the developer, who often holds contests and showcases of the best players' creations on the game page.

The use of still images from digital games is generally regarded as fair use, as they not only remove the interactive part, but also represent an insubstantial part of the game. The official stance of the Digital Game Research Association (DiGRA) is that "screenshots are inevitably a miniscule, static portion of a video game as a whole" [56: 2]. Moreover, it is obvious that the more images of a game circulate, the more its popularity increases. Still images from gameplay, or even cutscenes and

Fig. 4 A town the author created in *Townscaper* © Oskar Stålberg 2021 [55]

non-interactive parts, cannot reproduce actual assets used in-game, such as whole 3D models, or the underlying code, and as such represent little to no risk for developers to freely circulate. However, what is most interesting in *Townscaper* is that Stålberg added the possibility to actually export one's own creations as 3D model objects that can be imported and modified in any 3D modeling software. This is most relevant to the issue of games as authorial tools, as the models exported from *Townscaper* are indeed compositions authored by players, but they are still a composition of blocks which are initially created by the developer. Stålberg has made no claims of rights on any kind of players' creation, despite the question being asked on the game forums [57]. As such, players are able to freely use the 3D models exported to create something else entirely, or even use them in another game. Stålberg also officially allows his game to be modified by players, adding new textures and replacing elements.

Another example that is worth examining is *SpaceEngine* [58], a "virtual Universe" that players can explore freely. The salient characteristic of *SpaceEngine* is that it aims to provide a realistic 3D reproduction of our known universe, with all charted stars and galaxies, as well as procedurally generated ones, for trillions of planetary systems extending billions of light years that players can explore seamlessly (see Fig. 5). It is possible to freely traverse the voids of space or the surface of celestial bodies such as planets, satellites, and asteroids, as well as to fly spaceships.

Much like *Townscaper*, there is not a real aim or objective in *SpaceEngine*, save for the pleasure of exploration. Needless to say, *SpaceEngine* became a favourite tool for the creation of images and videos of deep space and alien planets, given the beauty of the sights and the countless possibilities it offers. Unlike *Townscaper*, players have much less agency in what they can create in *SpaceEngine*. Much like in the game *No Man's Sky* [59], the game creates procedurally generated planets and landscapes, but while it is the algorithm creating them – which is in turn created by the game developers – the important point is that there is no input from players in their design, only in where and how to observe and interact with them. In *SpaceEngine* it is possible to edit planetary systems and create new ones, but the basic forms and parameters are all embedded in the *SpaceEngine* code, and it is not possible, for instance, to create cubic planets, or add architectural structures on them. Nevertheless, the controls *SpaceEngine* offers on camera, visuals, and movements are vastly superior, with parameters such as exposure and tone mapping. Vladimir

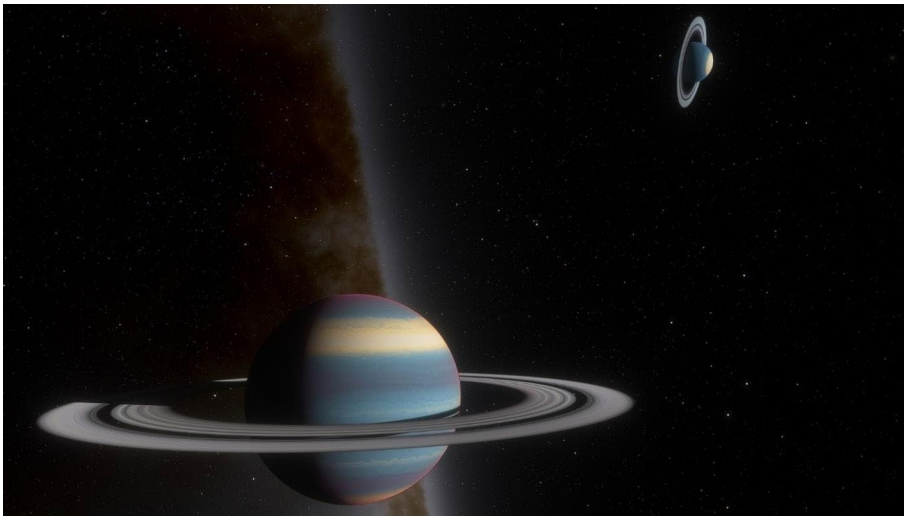

Fig. 5 A screenshot of procedurally generated planets in *SpaceEngine* © Cosmographic Software 2019 [58]

Romanyuk, the author of *SpaceEngine*, is well aware of the potential for user-created works from the game, and gives players "the right to re-use images, videos, and other such media created in the Software for the purposes of non-commercial education and non-commercial virtual exhibits, provided that "SpaceEngine" is credited." [60] The unique characteristic of *SpaceEngine*, which is more in line with an actual authorial tool than a game, is that it is possible to purchase a *Pro* licence which allows for "personal commercial use, and unlocks some 'professional' features helpful for capturing video footage and creating space assets for your own projects" [61]. It is of note that the *Pro* licence is not just a legal licence that allows players and content creator to use *SpaceEngine* in commercial endeavours, but it also features additional tools for the creation of videos and other derivative works from the game.

6 Conclusion

The situations that can allow for derivative work from digital games to be considered original enough are varied, and as such a case-by-case analysis is warranted. Digital games can be copyrighted according to their constituent parts: code, visual assets, animations, sound and music, story, and characters. All elements that already fall within one or another category of copyright, and as such are easy to identify, isolate, and protect. Derivative work – depending on the jurisdiction – as we have seen, allows for more flexibility, as "a discrete instance of gameplay recorded as a single audiovisual may be eligible for copyright protection" [26: 414]. Moreover, players agree to Terms of Service and EULA when they play a game, and as such "publishers could still have considerable control through a derivative work theory. Ultimately, because potential defendants in this case often contract away their fair use rights,

publishers will likely retain a significant amount of control over most types of games under current precedent. The authorship/originality argument is the most capable, at the moment, of disrupting this status quo." [26: 419].

There are, however, some elements that can be considered valid on all works derived from digital games, in order to consider them eligible for copyright protection:

1) The work displays sufficient originality, and especially is not extracted from a part of the game that does not allow for player to act on the visible output of the game.
2) The work is a medium different from the original one, i.e. it is not another game.
3) The ToS and EULA of the game allow for the creation of the specific derivative work.

If these three basic principles are respected, it can be argued that the derivative work is worthy of consideration, and there can even be instances when it can be considered an entirely original work, as much as the photograph of a landscape or building.

The importance of this matter is that there is much artistry in digital games that might get lost or overlooked for their being *games*. For instance, there are details that can be too minute to really be appreciated in the heat of the action, or certain areas might never be explored by some players in an open world game. Digital games have become extremely complex and artistically developed, and as such it is worth permitting all artists, even outside the specific domain of digital games, to be allowed to investigate them and explore new directions.

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