The Legal Nature of Video Games — Adapting Copyright Law to Multimedia

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Abstract
In Copyright Law, video games are still a contentious matter. The multimedia nature of games brings up the question on how to define their legal nature. In most jurisdictions, video games are considered an arrangement of a multiplicity of original and derivative works. However, some have argued to define video games as a single ‘multimedia work’ rather than a product of many works of copyright.

This article analyses the different types of original and derivative works contained in video games before evaluating the necessity and feasibility of a multimedia category of work, arguing in favour of the current system.

Keywords
Copyright Law; Underlying Works; Case Review; Multimedia Work
1. **Introduction**

The determination of the legal nature of video games, especially with regard to copyright is not easy. Video games are highly interactive multimedia, comprising many parts that are the product of creative effort. Is 'the video game' a work of copyright? If not, are there underlying protected works of copyright and if so, as which categories of works do they classify?

In the United Kingdom, the categories of works protected by copyright are outlined in ss. 3 to 6 of the Copyright, Designs and Patents Act 1988 (CDPA), but video games as a whole don't seem to fit any of these categories. However, video games' individual creative parts indeed do.

While it could be argued that individual parts do not matter and video games do not fit in any of the categories *per se* (Torremans, 2013, p. 199), it is now a well-established fact that video games are "an amalgamation of individual elements that can each individually be copyrighted [...] if they achieve a certain level of originality and creativity" (Ramos, 2013, p. 7).

2. **A Single Product But Many Works of Copyright**

British case law has dealt with the issue of several creative contributions contained in a single work before and found that a single product can in fact contain several works protected by copyright.

The High Court of Justice decided in *Electronic Techniques (Anglia) Ltd. v. Critchley Components Ltd.*,¹ that "a particular product may be protected by a number of different categories of copyright.” However, it also held that while “an author can produce more than one copyright work during the course of a single episode of creative effort”, he would not produce several copyrights 'in respect of the same creative effort' in which case copyright would subsist in a single category of work only.

But as sound recordings and films do not require originality (S. 1(1) CDPA) and are protected independently (Bainbridge, 2012, p. 69), this reasoning must be confined to original literary, dramatic, musical or artistic works.

In *Norowzian v. Arks Ltd. (No. 2)*,² the court held that a film could as well be a dramatic work if the necessary requirements are fulfilled.

Following the reasoning of the courts in the two cases discussed above, video games can contain several copyrighted original works, provided they are the result of separate creative efforts, and may also be protected as a sound recordings or films.

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3. **Original Works in Video Games**

There are many different creative contributions in a video game, therefore, there can be a variety of different copyrighted original works in video games.

3.1 **Computer Programs**

Every video game contains software to communicate with the device it is played on. Insofar as that communication is concerned there is no conceptional difference between a video game and any other computer program.

In *Sega Enterprises Ltd. v. Richards*, one of the earliest copyright cases regarding computer programs, the defendants used the machine code of *Frogger* (Sega, 1981) to design a similar video game by themselves. The defendants claimed, after the stage of a so called 'general overview' of the game, the development of computer programs was mostly automatic with the computer itself playing an important role in this process and therefore the final product lacked sufficient originality. However, the court disregarded the defendants' argument and ruled that considerable work was done upon the assembly code as well as the machine code and they were protected as literary works accordingly.

Now ss. 3(1)(b) and (c) CDPA expressly include computer programs as well as their preparatory design material as protected subject matter. The Court of Appeal held in *Nova Productions Ltd. v. Mazooma Games Ltd.*, that both subsections are to be read together and refer to a single copyright for the actual program and its design. The case concerned arcade type video games of pool; the plaintiff asserted several copyrights in the work and claimed that the defendant infringed these works by designing a similar game. Until now, this is the only case in the United Kingdom that discussed copyright in video games in detail.

The European Court of Justice clarified in *Bezpečnostní softwarová asociace v. Ministerstvo kultury* that while source and object code is protected subject matter of a computer program, a graphic user interface does not fall under the scope of protection.

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4  A program's assembly code is an arrangement of instructions for a computer which can easily be edited by a programmer, whereas its machine code is a set of instructions which the computer can process directly.


6  C-393/09.
Therefore, only the code itself is protected as literary work, but the visual display a computer program produces does not fall under its scope of protection.

### 3.2 Literary Works

Besides the source and object code, other parts of video games may classify as literary works as well.

Many games put emphasis on telling a story and do so through spoken dialogues or by text appearing on the screen. S. 3(1) does not exclude certain forms of expression from the definition of literary work. This was discussed in *University of London Press Ltd. v. University Tutorial Press Ltd.* already. In this case involving examination papers the court held that the term 'literary work' was not to be taken literally and was to be defined as a "work which is expressed in print or writing, irrespective of the question whether the quality or style is high." Now, this definition must be adapted to contemporary technology and include works contained in digital media (Bainbridge, 2012, p. 56).

Therefore, the storyline, in-game texts and dialogues may be protected as literary works themselves, assuming sufficient originality.

### 3.3 Dramatic Works

When analysing the story in a video game, which is told partly in writing or spoken word, and accordingly protected as a literary work, one can reasonably raise the question if the story, as displayed visually during playing of a video game, can be protected as a dramatic work.

The notion of dramatic work is roughly outlined in s. 3(1) CDPA. There is no clear definition, it is simply noted that a dramatic work "includes a work of dance or mime". However, in *Norowzian v. Arks Ltd. And Others (No. 2)* the court defined dramatic work under the CDPA as "a work of action, with or without words or music, which is capable of being performed before an audience." While the CDPA does not give a definition of dramatic work, it excludes dramatic works from the definition of literary works in s. 3(1). Consequently, as the High Court in *Nova Productions Ltd. v. Mazooma Games Ltd.* observed, "a work cannot be both a dramatic work and a literary work."

This reduces the protectable subject matter considerably. While spoken or written storyline, which may be protected as literary work, cannot enjoy protection as dramatic work, only the visually perceivable actions of the in-game characters can.

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7 [1916] 2 Ch 601.

However, care must be taken when assessing dramatational actions, a certain degree of ‘drama’ is required. Analogous to broadcasts of sporting events, this is dependent on the game designer “add(ing) anything of dramatic significance to the action” (Garnett et al., 2010, para. 3-39). The subsisting degree of dramatic significance will usually be higher in action or role play games than for example in racing or sporting games where the emphasis is on challenging the skill of the player.

The last requirement for protection is that a dramatic work must be capable of being performed. This was denied in Nova Productions Ltd. v. Mazooma Games Ltd. for the reason that every time the game is played the sequence of images will differ. However, this reasoning should be confined to the facts of the case as it involved rather simple arcade games of pool where there is barely any dramatic significance at all. High end video games feature characters which behave almost like real actors, and the underlying computer program dictates a similar pattern of behaviour every time the game is played. At least this behavioural pattern will be sufficiently similar each time a game is played that the dramatic work would be capable of being performed.

Also, even if protection as dramatic work for a video game's animation was denied on the grounds that it differs every time the game is played, there are games that incorporate animated cut-scenes, where the player will stop playing for a moment to watch a short film that accompanies the story progress (Ryan et al., 2014, p. 106). These scenes lack interactivity and the images shown on the screen will not differ every time the game is played. In Norowzian v. Arks Ltd. and Others (No. 2), protection as dramatic work was denied on the ground of the film's cutting technique (so called jump cuts) which made live performance of the work impossible. This may result in video games incorporating dramatic aspects that cannot be performed in real life due to the style and manner of animation lacking protection as dramatical works.

3.4 Copyright Protection of Characters
Characters play a very important role in video games. Some games will feature newly created fictional characters, some might use previously existing works, for example if a new iteration in a series of video games with reoccurring characters is developed. But characters in video games can also be non-fictional, for example football players in FIFA 15 (EA Sports, 2014), which are designed to be reproduced from their real counterpart as faithfully as possible.

In the case of Wombles Ltd. v. Wombles Skips Ltd., relating to the use of the name of fictitious animals called 'Wombles', the High Court clarified that there is no copyright in the name of a fictitious character.

However, the court noted that “it may be a defect in the law that [...] the authoress has not a complete monopoly of the use of that invented word.”

The argument is in line with the reasoning in *Exxon Corporation and Others v. Exxon Insurance Consultants International Ltd.*¹⁰ where it was held that a fictitious word was not protected as literary work. Although it might be argued that the lack of protection of names under copyright was a ‘defect in the law’, protection by trademark law is available and regularly used.¹¹ While trademark protection has the disadvantage of required registration, it is nevertheless comprehensive and sufficient to protect the name of a character against commercial use by third parties.

### 3.5 Artistic Works

The visual appearance of characters however can be protected as an artistic work under s. 4(1) CDPA. It was developed in *Anacon Corporation Ltd. v. Environmental Research Technology Ltd.*¹² that the protected subject matter of artistic works is what is “visually significant”. In *Michael Mitchess v. British Broadcasting Corporation*¹³ this notion was not further discussed and it was held that drawings of fictional characters were protected as artistic works. The CDPA includes “any painting, drawing [...]” into the definition of graphic work according to s. 4(2)(a) (emphasis added). Consequently, no distinction can be drawn between characters drawn by hand and characters created using computer assisted design (CAD).

As everything which is visually significant is protected and includes “any painting [or] drawing” accordingly, not only characters of video games will be eligible for protection as artistic works. Every self-contained model and designed structure in a video game will be protected accordingly.

### 3.6 Musical Works in Video Games

The protection of music in video games is of special importance as it is the part of the game which is most independent and therefore most likely to be exploited separately. Unlike text or parts of the scenery in video games, music can regularly be enjoyed outside this context. This is especially true if pre-existing works have been used in the sound track of a video game. But even if music is created specifically for a

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11 Cf. EU Trademark EU000076653 of Sonic the Hedgehog, the protagonist of a popular video game series of the same name (Sega, 1990).


video game, it can nonetheless be commercially exploitable, which can be demonstrated by the sale of video game soundtracks.

Musical works do not pose any particular issue within the context of a video game; they are protected under s. 3(1) CDPA. If the relevant music contains lyrics, then they are protected as literary works under the same subsection. Therefore, music in video games enjoys the same protection as it does in any other context.

3.7 Sound Effects as Original Works

Sound effects however, regardless how skilfully crafted, do not fall under the definition of a musical work. The notion of music is not clearly defined either in the CDPA or case law (Waelde et al., 2014, p. 67). While it goes beyond the notation of a melody and, arguably, may include noises such as scratching of vinyl records (ibid), it cannot include incidental sound effects because it requires “effects of some kind on the listener's emotions and intellect” (Garnett et al., 2010, para 348). There may be borderline cases of skilfully crafted sound effects that are designed to have an intentional impact on the player’s emotions such as inducing fear after a loud explosion, but nevertheless they will never have an effect on the player’s intellect in a way that music has.

3.8 Protection of Video Games as Databases

Scholars have pointed out that video games could be protected as databases in accordance with the EU Database Directive (Directive 96/9/EC; Duisberg et al., 2013, p. 359). S. 3A(1) CDPA defines a database as “a collection of independent works, data or other materials which – (a) are arranged in a systematic or methodical way, and (b) are individually accessible by electronic or other means.” Although Article 1(3) of the Database Directive states that 'computer programs used in the making or operation of databases' are not protected under the Directive, this does not preclude protection as a database independently from the program that is used to operate it.

However, there are two issues with the idea of protecting video games as databases. Firstly, although there is a collection of works within the game, they are not independent. Similarly to films, where there is an interaction between the individual components that the recording consists of (Waelde et al., 2014, p. 63), there is an interaction between each work within a video game, regardless if it is protected by itself. If a single component from a video game is taken by itself (e.g. a single file containing a sound effect), it has no meaning in the context of the game anymore.

Secondly, the works are not independently accessible. They will be perceivable on the screen or on the loudspeakers only in the way the underlying computer program dictates, so they can only be accessed in the fashion the developer intended it. There would be no systematic or methodical arrangement, were the works accessed by other means than
playing the game because there was no intent during the development to make each component of the game accessible in that way.

Therefore, video games or portions of it do not fall under the definition of database within the meaning of the CDPA or the EU Database Directive and are not protected as such.

3.9 Other Original Works in Video Games
The creative parts of the video games discussed above give a formidable impression of the complexity of today’s video games and the various types of copyrighted works embodied in them. But of course this list is not complete; there are many more parts of video games that can enjoy copyright. For example, in *Nova Productions Ltd. v. Mazooma Games Ltd.* the Court of Appeal held that the series of frames produced on the screen were a series of graphic works protected by copyright, similar to that of a series of drawings. Following this reasoning, every screenshot taken from a video game constitutes a copy of that particular graphic work.

4 Video Games as Sound Recordings and Films
While video games do not constitute a single original work as such, they may be protected as a recording if they fall under the definitions of film or sound recording within the meaning of ss. 5A and 5B CDPA.

As it was shown from the ratios of *Electronic Techniques (Anglia) Ltd. v. Critchley Components Ltd.* and *Norowzian v. Arks (No. 2)*, while there can be only one type of original work created by a single creative effort, there is no exclusivity between those works created by multiple creative efforts and the respective derivative works in s. 1(1)(b) CDPA.

4.1 Video Games as Films
The probably most important but also contentious question in classifying video games under copyright law is if video games are to be considered films. To answer this question, the matter will be explored from several aspects, including international jurisprudence.

The German Higher Regional Court of Frankfurt am Main has decided in one of the earliest video game cases¹⁴ that the audiovisual appearance of games lacked originality as the moving images on the screen were a mere “translation of the underlying program”. It also declined protection as moving images,¹⁵ for moving images require the ‘playback of a recorded natural plot’ and the appearance on the screen was just “an


15 'Moving images' (Laufbilder) according to German law are films that do not classify as works for lack of originality, s. 95 of the German Copyright Act 1965, enacted on 9/9/1965 and last amended on 1/10/2013.
evaluation of reaction and skill of the player”. However, this line of argument did not prevail for long. Other German courts ignored the reasoning and ever since, video games are protected as film works in Germany for they are ‘at least made similarly to film works’.

A similar line of argument as that of the Frankfurt court was made by the defendants in the US-American case of Stern Electronics v. Kaufman:

Defendants argue that the audiovisual material is not original since it is totally dependent upon the memory device and the underlying computer program. The only original work of authorship, they claim, lies in the computer program [...] (Stern Electronics v. Kaufman, p. 638)

The court however, did not follow the defendants' claim and deemed the video game in question an audiovisual work within the meaning of 17 U.S.C. §102(a)(6). The US District Court of Nebraska in Midway MFG. Co. v. Dirkschneider followed the ruling and explained the audiovisual nature of video games further:

The games' visual displays are a series of related images. The images are intrinsically intended to be projected on a cathode ray tube by means of electronic equipment. These characteristics of the plaintiff's games clearly establish that the plaintiff's works are copyrightable audiovisual works. (Midway MFG Co. v. Dirkschneider, p. 480)

French courts on the other hand declined protection of video games as audiovisual works on grounds of "the absence of linear projection of the sequences, the intervention of the user to modify their order being always possible, and the succession not of animated sequences of pictures but of fixed sequences which can contain animated pictures" (Duisberg et al., 2013, p. 359-60).

The UK court system did not explicitly deal with this issue so far. In the High Court Case of Nova Productions Ltd. v. Mazooma Games Ltd., the claimant asserted film copyright infringement in his video game. The court did address this issue only briefly and dismissed the claim for the reason that the defendants would not have copied the video game by photographic copying anyway. Unfortunately this short assessment left

16(1983) GRUR 753.
the question of film copyright protection for video games in the United Kingdom open.

S. 5B(1) CDPA clearly defines a film as 'a recording on any medium from which a moving image may by any means be produced.' This broad wording when applied literally consequently covers many multimedia works and especially computer programs and games (Cornish et al., 2010, p. 458-59).

With the exception of the French courts, there is unity now in defining video games as films or audiovisual works respectively. The ruling of the Cour de cassation is not entirely comprehensible, as the audiovisual work in Article L112-2 of the French Code de la propriété intellectuelle is defined as broad as a film in the CDPA, covering "cinematographic works and other works consisting of sequences of moving images". Therefore, a video game's moving images on screen, even though they are modified by the player every time the game is played, must be protected as films.

But this protection can be insufficient, as the case of Stern Electronics v. Kaufman shows. The defendants designed a video game closely to the one previously published by the claimant. As this can be done even when writing a new underlying computer program and thus not infringing copyright in it, the copyright holder needs to rely on film copyright to protect the audiovisual appearance of the work. But as the High Court in Nova Productions Ltd. v. Mazooma Games Ltd. held, film copyright in the UK only protects against infringement by copying by photographic means. For video games this means the game must be copied as a whole, so there is no protection against close recreation of the game.

4.2 Video Games as Sound Recordings

The accompanying sound track of video games can also be protected as sound recording in accordance with S. 5A(1) CDPA. In s. 12(9) of the Copyright Act 1956, soundtracks of cinematograph films were explicitly excluded from the definition of sound recording, but the exclusion was lifted in the current Act with the intention to include film soundtracks under the definition of sound recording (Garnett et al., 2010, para 3-78).

As established above, video games fall under the definition of film for the purpose of copyright protection, therefore, their soundtrack must be treated equally. Consequently, video game soundtracks are protected twofold. Firstly as accompanying soundtrack of a film, and secondly as sound recordings in accordance with S. 5A(1) CDPA (Garnett et al., 2010, para 4-55).
5. Video Games as Multimedia Works

This vast variety of works found in video games ultimately raises the question if this is feasible at all. Some international courts have made this observation already and favoured deeming video games a single *sui generis* 'multimedia work'.

The Supreme Court of Italy dealt with a case involving the circumvention of technological protection measures by mod chips installed in video game consoles. During the proceedings of the case, the court observed that video games, although containing a computer program, are not to be confused with it, as the computer program was only a 'necessary precondition to get to the crucial and central part of the video game', which was more of an audiovisual character. The court went on and defined video games as single 'complex "multimedia" works'.

The French *Cour de cassation* recognises video games as multimedia works since the decision of *Cryo c/ SESAM*, but inconsistently grants each part of that work individual copyright because French law does not recognise multimedia works as a category of work protectable under copyright (Duisberg et al., 2013, p. 360-61).

The arguments and findings of the Italian and French courts deserve merit for trying to summarise the complexity of video games under a single 'multimedia work'. However, as the *Cour de cassation* observed, so far there is no legal provision that would support these findings under current law.

Admittedly, the reasoning of the Italian Supreme Court makes sense in the circumstances of the case, which involved the infringement of a video game as a whole. But if infringement was not by way of copying a game disc but for example reproducing a part of a background song in a game? Then, with protection as a single multimedia work, only 'a small portion of a small portion' of the game would be reproduced. Although case law has shown that even when very small parts of the work are copied, such as a single frame of a film are still substantial parts of the work and can constitute infringing copies of the work (*Spelling Goldberg Productions Inc. v. P.P.C. Publishing Ltd.*) , this view misses the fact that individual aspects of video games, such as the character design or the accompanying music are an intellectual creation of their own and also commercially exploitable by themselves.


\[\text{21 Cour the cassation, arrêt no. 732 (07-20.387) from 25/6/2009}\]

Finally, from a pragmatic perspective there is no need for a new category of work. In cases concerning the reproduction of a whole video game, it is sufficient to rely on one of the major works in the game such as film or computer program. In cases of close imitation of a video game where no underlying work is infringed directly, the issue could as well be resolved by expanding the protection of films to that of an original work.

For these reasons, although the idea of summarising a video game under a single type of work is not devious, the notion misses the point of separately exploitable works within the product as a whole, and is not necessary as smaller adaptations to the current law would be sufficient to fill the gaps in protection.

6. Summary
It has been shown above that video games consist of a considerable number of works of different categories within the CDPA. While this current state of law might be confusing at first sight, it is remarkably systematic once video games are viewed as an arrangement of many creative efforts. Over the last decades, courts have learned that a video game is much more than only a computer program, be that still an important aspect of it. Unfortunately, there is little copyright litigation over video games in the UK, so it is understandable that British case law still seems to struggle with certain issues such as subsuming the audiovisual appearance of a video game under that of a film.

But even though the current law works and sufficiently protects video games as well as their creative contributions, one can only be excited about what changes in law will come from UK and EU legislation, especially with regards to film copyright which has not been not fully harmonised so far, and with several European countries protecting such works much more comprehensively than the UK.

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