*Dr. Mihály Ficsor**

COPYRIGHT STATUS OF VIDEO GAMES**

I. Introduction

When one speaks about the birth of video games as an artistic and entertainment genre, it is not possible to refer to a concrete event like Guttenberg's invention of the printing press. Its emergence took place in a way quite similar to cinematography, where there were certain precursors already in the first half of the 19th century, such as Simon von Stampfer's stroboscope in the 1830s or Francis Ronalds' camera in 1845 used for meteorological observations. William Lincoln's "zoopraxiscope" in 1867 and Edward Muybridge's galloping horse in 1878 brought us closer to what then became finally August and Louis Lumière's "Cinématographe", which projected moving pictures for the first time in Paris in December 1895 to a paying audience. That was the real quantum jump, the first step towards the film industry as we know it now, with great cultural values, with enormous entertainment potential and with huge successes of the creations by world famous directors, actors, actresses and film music composers. In 2018, for example, the film industry produced USD 41.7 billion box-office income and, along with other – including digital online – distribution channels, USD 136 billion.

As regards video games, there were also certain precursors before it became the phenomenon the way we know it nowadays. William Higginbotham created in 1958 Tennis for Two by means of an early computer and oscilloscope, but the real beginning took place in 1961 and 1962 when Steve Russell, in collaboration with others, wrote the program of Spacewar!, the first version of space combat video games by using the computer of the Massachusetts Institute of Technology (MIT) in Boston. At that time, that was just for non-commercial self-entertainment purposes of the teachers and students at MIT and their friends. The kind of quantum step – similar to the Lumière brothers' in the case of cinematography – was made by Atari's Pong in 1972 created by Allan Alcorn, the first commercially successful arcade video game, and by Ralph Baer's Magnavox Odyssey console, also released in 1972, which made possible also the household use of video games. Pong was a table-tennis-themed game with very simple two-dimensional graphics; two paddles represented by short straight lines were returning the ball – just a blinking point – back and forth by the same

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** Member of the Hungarian Council of Copyright Experts, former Assistant Director General of the World Intellectual Property Organization (WIPO).

player or two different players and the score was kept by numbers at the top of the screen. In view of the success of the product, Atari released several versions of Pong adding new features to the original "gameplay"; then more and more competitors appeared, producing ever more sophisticated games, and finally – like now – appearing on the screen in the same quality as high-definition films.

The market success of the game industry has reached – and is even surpassing – that of the film industry. According to the 2020 edition of the "Global Game Market Report"[1], the forecast is that this year the global market revenue of the industry will be USD 159.3 billion (a 9.6% increase over 2019), within which mobile (smartphone and tablet) gaming will have the largest segment with USD 77.2 billion (with 13.3% growth) and it continues outpacing the PC and console game market (based mainly on Xbox One and PlayStation 4), although its revenue will also grow to USD 45.3 billion (at a 6.8% rate).

The topic of this study is the copyright status of video games. Therefore, it is an at least as important question what kinds of qualitative developments and new forms of uses are taking place in the game industry. The video games, while maintaining their game nature – so much that they even take the form of highly popular e-sport events – function ever more as entertainment products in the same markets and exploitation channels as audiovisual works. This is also manifested in certain mergers of the film and game industries; film variants are prepared of video games and *vice versa*, and popular actors appear now in games not only as "voice actors" but also with their own images.

Otherwise the comparison of the game industry to the film industry in a study to be prepared from a copyright angle is justified, at least, for two substantive reasons. First, the game industry is faced with the same kinds of structural issues concerning its copyright status as the film industry did before it became regulated in Articles 14 and 14*bis* of the Berne Convention – in the sense that, although it was easy to recognize that cinematographic works did deserve copyright protection, the questions of under what category and with what sorts of specific rules they should be protected raised uncertainties and led to intensive debates. Second, as it is discussed below, the current dominant position is that video games may enjoy adequate protection on the basis of the existing categories of works without the need for providing them a separate stand-alone status, and one of the categories – in fact the basic one – is audiovisual works, which is suitable (and is becoming ever more relevant) for this purpose.

In the study

- *first,* the definition of video games is outlined;
- *second*, the basic characteristics of video games and the gaming ecosystem are described;

[1] "Global Game Market Report 2020 (Free Edition)" published on July 13, 2020, available at *https://worldbusinessanalytics.com/2020/07/13/global-game-market-report-2020-free-edition/*. (This website – and all the other websites referred to in the paper – was visited, for the last time on October 15, 2020.)

- *third,* it is presented how the idea of protecting video games as "multimedia productions" emerged and, in that connection, also what similarities they have to electronic databases;
- *fourth*, it is reviewed what are the main trends of legal classification and protection of video games in national copyright laws;
- *fifth*, the typical case law developments in two countries – the United States and France – are described more in detail and conclusions are drawn for the legal consequences of the copyright classification of video games;
- *sixth*, the audiovisual aspects of video games are analyzed more thoroughly;
- *seventh*, the application of the copyright norms to certain new ways of exploiting video games – such as online streaming, live transmissions, interactive making available of recorded "gameplays" and e-sport events – are reviewed;
- *eighth,* the role of music in the creation and use of video games is considered, with special attention to the tasks of collective management organizations;
- *ninth*, the borderline area of permitted uses and infringements is visited with special attention to the issues of "clones", "mods", "machinima" versions and gameplay commentaries, along with the related contractual systems and the issues of the use, and circumvention (by "modchips"), of technological protection measures;
- *tenth,* conclusions are offered in which, *inter alia*, the audiovisual-work aspects of video games, the role of music, and the tasks of collective management organizations in the exercise of rights in the non-software-related elements of video games are stressed.

II. Concept and definition of video games

Let us quote some attempts to define video games:

> A video game is a game which we play thanks to an audiovisual apparatus and which can be based on a story.[2]
>
> A game in which the player controls moving pictures on a screen by pressing buttons.[3]
>
> A video game is a computer game that you play by using controls or buttons to move images on a screen.[4]
>
> A video game is an electronic game that involves interaction with a user interface or input device, such as a joystick, controller, keyboard, or motion

[2] *Nicolas Esposito:* "A Short and Simple Definition of What a Video Game Is"; available at *https://www.utc.fr/~nesposit/publications/esposito2005definition.pdf*, p. 1.
[3] Cambridge Dictionary online, at *https://dictionary.cambridge.org/dictionary/english/video-game*.
[4] Collins Dictionary online, at *https://www.collinsdictionary.com/dictionary/english/video-game*.

> sensing devices, to generate visual feedback […] on a two- or three-dimensional video display device such as a TV set, monitor, touchscreen, or virtual reality headset.[5]
>
> A game played by electronically manipulating images produced by a computer program on a monitor or other display.[6]

These and similar definitions reflect certain elements of video games, but none of them characterizes video games fully and adequately from the viewpoints that are relevant for the copyright status of video games. The first definition only concentrates on the audiovisual aspects and does not mention the software element and the interactive operation of video games; the second one refers to interactivity but does not express – unlike the first one – the narrative aspect of games; in contrast, the third one, only emphasizes the computer-related features. Only the fourth and the fifth definitions pay attention more or less clearly both to the electronic manipulation of the games (and through it, at least indirectly, to the underlying software) and to the visual displays (and through it, at least indirectly, to the audiovisual aspects of the games).

In the international treaties, the EU directives and national copyright laws, there are no specific provisions on video games; consequently, there is no definition either. During the WIPO meetings before and immediately after the adoption of the WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT), when the copyright status of multimedia productions was discussed, reference was made also to video games as an example of such productions (see below), but the discussions did not reach the level of norm-setting; it is the WIPO Glossary of Copyright and Related Rights Terms which contains a definition of multimedia productions, without, however, mentioning video games.

WIPO dealt with the copyright status of video games later in specific studies and in articles published in the WIPO Magazine as discussed below. One of those studies – the most detailed one published in 2013 with rich comparative material – seems to contain quite an adequate definition of video games which expresses their decisive features and complex nature (in a way that it stresses those aspects too which are truly relevant from the viewpoint of copyright). It reads as follows:

> Video games are complex works of authorship – containing multiple art forms, such as music, scripts, plots, video, paintings and characters – that involve human interaction while executing the game with a computer program on specific hardware.[7]

5 Wikipedia, at *https://en.wikipedia.org/wiki/Video_game*.
6 Oxford English Thesaurus, at *https://www.lexico.com/definition/video_game*.
7 *Andy Ramos, Lura López, Anxo Rodriguez, Tim Meng and Stan Adams:* "The Legal Status of Video Games: Comparative Analysis in National Approaches", WIPO publication 2013, available at *https://www.wipo.int/edocs/pubdocs/en/wipo_report_cr_vg.pdf;* page 7, point 2.

As mentioned above, the EU copyright directives do not contain any definition of video games but, if the case law of the Court of Justice of the EU (CJEU) is also taken into account, it may be said that, in EU law in a broader sense, there is a definition. In the *Nintendo Co. Ltd v PC Box Srl* case[8], the question raised by a preliminary reference was how technological protection measures (TPMs) may be applied to video games. To answer this question, the CJEU had to deal also with the copyright status of the games, since the provisions of Article 6 of the InfoSoc Directive (Directive 2001/29/EC) concerning TPMs are applicable for the protection of copyright and related rights. The Court has adopted a definition that is in harmony with the key elements of the definition in the WIPO study quoted above. The CJEU has found that video games "constitute complex matter comprising not only a computer program but also graphic and sound elements, which, although encrypted in computer language, have a unique creative value which cannot be reduced to that encryption".[9] In another judgment adopted in the *BSA v. Ministerstvo Kultury* case[10], in principle the issue was the relationship between a computer program and its "graphic interface", but it was possible to understand it in a way that it also applied to the relationship of the computer program element and "the rest" actually appearing on the screen (and in that way, it stated implicitly the principle of "distributive" (parallel) protection of the two elements):

> A graphic user interface is not a form of expression of a computer program within the meaning of Article 1(2) of Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs and cannot be protected by copyright as a computer program under that directive. Nevertheless, such an interface can be protected by copyright as a work by Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society if that interface is its author's own intellectual creation.[11]

[8] Case C-355/12 (23 January 2014).

[9] Ibid., para. 23. The Court has added: "In so far as the parts of a video game, in this case, the graphic and sound elements, are part of its originality, they are protected, together with the entire work, by copyright in the context of the system established by Directive 2001/29."

[10] Case C-393/09 (22 December 2010).

[11] See point 1 of the operative part of the judgment at the end thereof. It is to be noted, however, that point 2 of the summary, as discussed below in another part of this study may not be fortunate if it is applied to what appears on the screen in the course of playing a video game (the so-called "gameplay"), because it reads as follows: "Television broadcasting of a graphic user interface does not constitute communication to the public of a work protected by copyright within the meaning of Article 3(1) of Directive 2001/29."

As discussed below more in detail, these definitions in the WIPO study and the CJEU judgments are appropriate. Only one additional remark is justified; namely that the above-mentioned "multiple artistic forms" and the "graphic and sound elements", in general, merge together and form parts of audiovisual works as one of the two key components of the complex structure of video games (the other being the computer programs to operate them).

I have stated above that national *copyright* laws do not contain any definition of video games (the emphasis is on the word "copyright"). Interestingly enough, it is possible to find a definition in a national law, but it is not a copyright law. It is Article 200*terdecies* of the French General Tax Code (inserted by Law n° 2007-309 of March 7, 2007 on the modernization of audiovisual diffusion and the future of television). The said provision of the General Tax Code defines video game as follows:

> "any entertainment software made available to the public on a physical support or online which integrates elements of artistic and technological creation, allowing to one or several users a series of interactions based on scenario or simulated situations and appearing in the form of animated images, with or without accompanying sounds."[12]

The definition may be regarded as appropriate, except for the term "entertainment software" which may be misleading (since it mainly refers to the software elements of video games). What is described in it correctly is the complex nature of video games composed of both artistic and technological elements operated interactively (therefore, necessarily by means of a computer program), which, for the users, appear in the form of moving images with or without accompanying sounds (if with sounds, in particular with musical works)[13]. The definition, in substance, corresponds to the classification of video games in the *Cryo* judgment of the French *Cour de cassation* as "complex works"[14]; it, however, makes it clear that it is only the technological element of a video game that qualifies as "software" (meaning computer program) and it contains another element or other elements that is not "software", but a work or works protected in accordance with the general copyright norms (or also with some genre-specific norms, such as those on audiovisual works, but definitely other than the specific norms on computer programs).

[12] The definition, in original French language reads as follows: « tout logiciel de loisir mis à la disposition du public sur un support physique ou en ligne intégrant des éléments de création artistique et technologique, proposant à un ou plusieurs utilisateurs une série d'interactions s'appuyant sur une trame scénarisée ou des situations simulées et se traduisant sous forme d'images animées, sonorisées ou non.»

[13] It is to be noted, that this element of the definition practically corresponds to the definition of "audiovisual work".

[14] See the discussion of the French situation under title VI below.

The expression used in the definition of the French General Tax Code corresponds to a meaning of the term "software" (in French, "*logiciel*") that is much broader than computer programs. It seems to refer to all kinds of digital contents. This is the reason for which the use of the expression "entertainment software" (in French: "*logiciel de loisir*") tends to be misleading and, due to its unclear borders, it is not suitable as a meaningful basis of copyright classification. For example, the definition in Wikipedia reflects this overly general meaning of "software":

> "Computer software is all *information* processed by *computer systems*, *programs* and *data*. Computer software includes *computer programs*, *libraries* and related non-executable *data*, such as *online documentation* or *digital media*."[15]

In view of this, for the definition of the Tax Code to be adequate, it should have used a term such as "any production in digital form" or "any digital media" instead of the term "entertainment software", since the latter might be understood in the above-mentioned broad sense instead of just as a computer program, and therefore it may be misleading.

III. Basic characteristics of video games and the gaming ecosystem

The statistics quoted above in the Introduction show that the video game industry is now rivaling with the film industry in the field of entertainment productions and services. The times when video games meant just short lines and a point moving on a mono-color computer screen have long been over. The development of processors and the growth of communication and storage capacities have reached ever more breath-taking levels, and digital graphics technologies have become able to produce movie-quality pictures. The publication of a new game of a mainstream developer is awaited now with the same kind of enthusiasm as a new film produced by a big film studio and created by a famous director with the participation of the most popular actors. For example, the game *Call of Duty: Modern Warfare* produced an income of USD 600 million within three days of its release in October 2019. It is worthwhile comparing it with the public reception of a successful film – *Joker* – released somewhat earlier in the same month, which produced a little bit less than USD 100 million[16] worldwide in three days.

However, from the viewpoint of the copyright status of video games, what are truly relevant are the questions of how they are created, what they look like and how they are used.

[15] Wikipedia at *https://en/wikipedia.org/wiki/Software*.
[16] The exact figure was USD 97.1 million.

There are different categories of games (action, adventure, fighting, role-playing, simulation, strategy, sport, puzzle, etc.), but the most typical, most popular and financially the most successful games are those which are similar to the above-mentioned *Call of Duty: Modern Warfare,* which – when played – truly appears like a film on a screen. They have producers (in the game ecosystem referred to as "developers"); they are created by directors, scenario and dialogue writers, composers and even actors to perform at least as "voice actors"; and they have a narrative story line, although offering alternative options in an interactive manner. The distribution of the games usually takes place by publishers through console makers or website platforms. For example, in the case of *Call of Duty: Modern Warfare*, the developer was Infinity Ward, the publisher was Activision, the scenario and dialogue writers were Brian Bloom, Justin Harris, Taylor Kurosaki and Ben Chaney; the music had been created by Sarah Schachner (a BMI member and composer of the music for various successful video games), and the game was made available through *PlayStation 4* and *Xbox One*, as well as online, including for mobile phones, to be used either in a single player or in multiplayer manner.

These are the features of video games which have to be taken into account from the viewpoint of their copyright status. Obviously, they represent a quality completely different from how electronic games used to appear with a blinking point moving left and right between two small lines representing paddles moving up and down.

IV. Video games considered as a category of multimedia productions in the activities of WIPO; relationship of video games with electronic databases

The preparation of the two WIPO "Internet Treaties" took place on the basis of the "digital agenda". It included the issues of (i) the application of the right of reproduction in the digital online environment; (ii) the right or rights to be applied for interactive making available of works and objects of related rights to the public (resulting in parallel overall regulation of the rights of distribution and communication to the public); (iii) the applicability of exceptions and limitations in the new environment; and (iv) the protection of technological measures and rights management information. It may also be considered that the protection of computer programs as born digital productions and electronic databases of digitized contents were also parts of the "digital agenda" (the only reason for which, in general, they were not mentioned as such was that the copyright issues of those works had been on the agenda of previous WIPO bodies and had also been regulated in the TRIPS Agreement). Therefore, the question may be asked, what was the reason why, although the growing convergence created by digitization and computer technologies between the various categories of works and objects of related rights was also a spectacular trend at that time already and

was discussed quite extensively, the most important phenomena of this kind of convergence, multimedia productions, were not included in the "digital agenda".

The answer to this question is that, in fact, the issue of the copyright status of multimedia productions (among which also video games were mentioned, although their development had not reached yet the stage of the present perfection and popularity) were discussed in WIPO events which were parts of the preparatory work in a broader sense, but it was decided that it would be too early to include this topic in the agenda of the committees of governmental experts (and later of the Diplomatic Conference). For this, it should be taken into account that important aspects of the preparatory work took place, in addition to the two Committees (the Berne Protocol Committee preparing what became the WCT and the New Instrument Committee working on what were later adopted as the WPPT), at regional consultations and "worldwide" symposiums in which both high governmental officials and outstanding copyright and technical experts participated.[17]

The issue of the copyright status of multimedia productions, and in particular the question of whether or not it would be necessary to extend WIPO's norm-setting activities to such productions were discussed quite in detail, first of all in the excellent introductory presentation by Pierre Sirinelli at the Worldwide Symposium which took place in the big conference room of the Louvre in June 1994 and was organized by WIPO in cooperation with the French Government[18]. What Sirinelli said, at that time, as regards the justification of "distributive" (parallel) protection seems to be still valid:

> What Does a Multimedia Product Qualify As? This question is important, as it determines the legal regime applicable to the product. Indeed it is the one that has led a number of people to advocate, on the grounds of what they claim to be uncertainties, the adoption of a specific regime.
>
> One thing is sure: […] the fact of multimedia products being on a digital medium should not on any account be a reason for the application of the special provisions on software. […] Even though it may be an important element of the product, the software involved must not be allowed to obscure the nature of the other elements. *Here* once again *we come up against the traditional debate which also surrounded certain complex computer creations like* expert systems or *video games*, and *which seems* moreover *to have been clearly settled in both legal literature and case law:* […] *special provisions are applicable to*

[17] For a detailed description of the preparatory works, see *Mihály Ficsor:* "The Law of Copyright and the Internet – the 1996 WIPO Treaties, their Interpretation and Implementation", Oxford University Press, 2002, pp. 14 – 41.

[18] "WIPO Worldwide Symposium on the Future of Copyright and Neighboring Rights", WIPO publication No. 731 (E), 1994 (hereinafter: the Louvre Symposium).

> *the program part, and ordinary copyright provisions to the rest* […] [which] should be classifiable, as the case may be, in one of the two categories already available, namely collective works, on the one hand, and audiovisual works on the other. Everything depends on the circumstances.[19]

In continuation, he expressed the view that the appropriate classification of "the rest" (that is, the elements of multimedia productions other than the software to operate them), in general appears to be the category of audiovisual works rather than that of "collective works".[20] At the same time, since electronic encyclopedias were also considered to be covered by the concept of multimedia productions, he also referred to a possible classification as databases – or depending on which parts of complex multimedia productions are involved, certain parts thereof as audiovisual works and other parts as electronic databases. In summing up that part of his presentation, he expressed the view that it would not be necessary – and even appropriate – to try to work out special legislative norms for multimedia productions.[21]

The question of the legal classification of multimedia productions was on the agenda in two similar worldwide events with high-level governmental and academic speakers and with the contributions of the key representatives of the various groups of stakeholders, in May 1995 at the WIPO Worldwide Symposium organized in the *Teatro Nacional de las Artes* of the Anthropological Museum in Mexico City in cooperation with the Mexican Government[22] and in October 1995 at the WIPO Worldwide Forum in the *Palazzo Reale* in Naples held in cooperation with the Italian Government[23]. The position of the participants has not changed since the Louvre Symposium on four issues: first, the multimedia productions do deserve copyright protection (video games were not analyzed separately but were considered to be covered); second, a parallel protection of the software part and "the rest" (literary and artistic works) of such productions is justified; third, the main candidate for the protection of "the rest" should be audiovisual works (although, in the case of certain

19 Ibid., p. 40.

20 As it is discussed below, he and also other commentators pointed out later that the classification as "collective works" – existing in France and in some other countries – would not be advantageous from the viewpoint of the creators of video games because, in the case of works qualifying as such, they would not be original owners of copyright; therefore, the classification of audiovisual works with co-authorship (in France as a category of "works of collaboration") is obviously more advantageous to them.

21 See, the Louvre Symposium, p. 41.

22 "WIPO Worldwide Symposium on Copyright in the Global Information Infrastructure", WIPO publication No. 746 (E/S), 1995. For the summary of the discussion, see *Mihály Ficsor:* International Harmonization of Copyright and Neighboring Rights" pp. 369 – 380, on multimedia productions, in particular pp. 372 – 374.

23 "WIPO World Forum on Intellectual Creations in the Information Society", WIPO publication No. 751 (E), 1996.

specific productions, also the classification as databases might be appropriate), and, fourth that, at least for the time being, there was no need for norm-setting in this respect. In Naples, a very intensive panel debate took place, moderated by the legendary Director General of WIPO, Arpad Bogsch and with the active participation of high-level representatives of the key negotiating parties in the preparation of what became the following year the WCT and the WPPT[24].

At the Naples Forum – the last one in that series of high-level worldwide events – as Assistant Director General of WIPO in charge of copyright and of the preparation of the "Internet Treaties" I had the honor to outline the conclusions of the debates in the various panels at the Forum. As regards multimedia productions, after summing up the main points mentioned above, I pronounced the agreement of the representatives of the international copyright community expressed at the Forum in this way: "We may have to further consider this category, certainly not in the Berne Protocol or the 'New Instrument' Committees, but at other WIPO forums."[25] Thus, multimedia productions were not dealt with in the two Committees and at the Diplomatic Conference and are not covered by the WCT and the WPPT.

The opportunity to discuss the copyright status of multimedia productions at another WIPO forum after Naples was offered quite soon; as early as in May 1997, in Seville at the WIPO International Forum on the Exercise and Management of Copyright and Neighboring Rights in the Face of Digital Technology[26], organized in cooperation with the Spanish Ministry of Education and Sport and with the assistance of the Spanish authors' society SGAE (from where my distinguished colleague and friend, the late Antonio Delgado Porras was my key partner in the organization of the program). One of the nine panel discussions was devoted exclusively to the copyright issues of multimedia productions.[27] It took place on the basis of an extremely high quality and very detailed paper[28] prepared – and given as an oral presentation – by Thierry Desurmont, Deputy Director General of SACEM and at that time the President of the Legal and Legislation Committee of CISAC.

The limits of the volume of this study would hardly allow reviewing all the details of Desurmont's paper. It seems sufficient to mention that he expressed full agreement with Pierre Sirinelli's above-mentioned opinion that multimedia productions (including video games specifically mentioned in his – Desurmont's – presentation) should be regarded as complex works composed of two elements: computer programs to operate the games and "something else" protected by copyright, which in fact was to be regarded more important

[24] Ibid., pp. 55–62.
[25] Ibid., p. 135.
[26] "WIPO International Forum on the Exercise and Management of Copyright and Neighboring Rights in the Face of Digital Technology", WIPO publication 756 (E), 1998.
[27] Ibid., pp. 41–53.
[28] Ibid., pp. 169–206.

from the viewpoint of the value and use of such productions[29]. He was also of the view that, in general (and this obviously applied to video games), the "something else" was to be qualified as audiovisual works[30], although, in the case of certain categories of multimedia productions – such as digital encyclopedias –, the classification as databases might also be justified.[31]

In the debate, the question of whether or not it would be necessary to include the issues of the legal classification and protection of multimedia productions (including video games) in WIPO's norm-setting agenda was also raised. Desurmont responded to this question in the negative and expressed the view that, for the time being, the parallel protection of the components of such productions on the basis of the existing categories of works and provisions was satisfactory.[32] This was the general opinion at the Forum and it has remained WIPO's official position since then. The questions of the legal classification and protection of multimedia productions (or any categories thereof) have not been included since then in the agenda of the various sessions of the WIPO Standing Committee on Copyright and Related Rights (SCCR) or of other official WIPO bodies.

In the title above, not only multimedia productions (the broad category of which is regarded to cover video games as a subcategory), but also the relationship of video games with electronic databases is mentioned. It was Desurmont, in his paper presented at the Seville International Forum, who also drew attention to the fact that the basic structural aspect of the above-mentioned Sirinelli principle of "distributive" (parallel) protection of the components of multimedia productions – according to which multimedia productions mean computer programs and "something else" usually protected by copyright – may be interpreted in a way that it also applies to electronic databases.

Desurmont referred to the provision of Article 1(3) of the Database Directive (Directive 96/9/EC), at that time just in the stage of implementation, which provides as follows: "Protection under this Directive shall not apply to computer programs used in the making or operation of databases accessible by electronic means." This is a highly relevant parallel since what is stated in the provision is practically the principle of "distributive" protection as presented by Sirinelli at the 1994 WIPO Worldwide Forum in the Louvre.

This also shows that although video games may be characterized as "multimedia productions", this may not pass as a substantive definition because the concept of "multimedia productions" is of a generic nature, referring to the results of a convergence of genres emerging with digitization and the possibility of using the digitized works and objects of related rights by means of computer programs in a flexible – searchable and non-linear – manner. As I

29 Ibid., p. 175.
30 Ibid., pp. 175–177.
31 Ibid., pp. 177–179.
32 Ibid., p. 45.

pointed out in 2000 at an ATRIP[33] Congress held in Santorini, in fact, the expression "multimedia" may be misleading; not a "multi" but a single – "mono" – universal "medium" has emerged, where, for appropriate legal classification and protection of a given production, it is the genre of the digitized "something else" for the creation and operation of which a computer program is used is what is really decisive. If it is said about something that it is a "multimedia production", it is not a sufficient answer yet to the question how it qualifies under copyright and related rights (in addition to only one thing that is necessarily clear; namely that one of its elements is a computer program, which is however not the entire production – far from that):

> Multimedia – and, within the phenomenon of multimedia, multimedia productions – are among the most obvious manifestations of the converging trends created by the application of digital technology.
>
> The expression "multimedia productions" is a misnomer. What are truly involved are rather *multi-genre, mono-medium* productions, since the essence of such productions is that they usually include various works and contributions belonging to all kinds of different genres in one single, all-embracing medium, the medium of binary digits (accessible and operated by means of built-in computer programs).[34]

It is in this sense that, in the WIPO Glossary of Copyright and Related Rights Terms, "multimedia" is defined:

> "Multimedia production": 1. A term frequently used with widely differing meanings and sometimes with meanings not sufficiently clear. Nevertheless, a multimedia production seems most generally understood to be a collection in digital format of, typically, more or less all kinds of works, except for three-dimensional works (that is, literary works, graphic works, audiovisual works and musical works, etc.) Phonograms in digital format as well as mere data also may be, and frequently are, parts of such collections. An indispensable feature of any multimedia production is that it may be used in an interactive, non-linear way, which is made possible by the other basic element of multimedia productions – which is always present in such productions – namely a computer program.

[33] ATRIP: International Association for the Advancement of Teaching and Research of Intellectual Property.

[34] *Mihály Ficsor:* "Legal Characterization and Protection of Multimedia Creations", presented at the Congress of the ATRIP in Santorini, Greece (September 17 to 19, 2000), p. 1.

> 2. Multimedia productions are to be protected under Article 2(1) and/or (5) of the Berne Convention, irrespective of their legal characterization (most frequently as collections, audiovisual works and/or computer programs) under the various national laws.[35]

As mentioned in the Introduction above, apart from the way video games were referred to in the course of the preparatory works of the WCT and the WPPT as a subcategory of "multimedia productions", they have not been included in the agenda of official governmental bodies of WIPO, they have only been covered by studies published by the Organization and in articles in the WIPO Magazine. These publications – in particular one containing a comparative analysis of the copyright status of video games – are referred to under the following title of the paper.

V. Alternatives of legal classification and protection of video games in national copyright laws presented in WIPO publications

As mentioned above, although the legal protection of video games has not been included in the agendas of the governmental bodies of WIPO, the Organization has dealt with this issue (not only with the copyright aspects but also with the industrial property aspects thereof) in the form of studies ordered and published, and also in shorter writings included in the WIPO Magazine. In particular, two studies should be mentioned. A practical-oriented publication covering the various intellectual property issues of video game production and distribution under the title of "Mastering the Game: Business and Legal Issues for Video Game Developers"[36] and another one of a more analytic nature concentrating on the intellectual property – in particular copyright – protection of video games entitled: "The Legal

[35] *Mihály Ficsor:* "Guide to the Copyright and Related Rights Treaties Administered by WIPO and Glossary of Copyright and Related Rights Terms", WIPO publication No. 891 (E), 2003, p. 297. The Guide to the Berne Convention included in the book refers to multimedia productions in this way:
Computer programs, databases and multimedia productions are the most important newly identified categories of literary and artistic works; all three relate to the development of information technology. Neither of them appears in the non-exhaustive list in paragraph (1). As mentioned above, computer programs have been recognized as literary works in Article 10.1 of the TRIPS Agreement and in Article 4 of the WCT, and, therefore, are discussed in the commentary to the latter provision. The protection of databases is analyzed under paragraph (5) of this Article of the Berne Convention, and databases also in connection with Article 5 of the WCT which, similarly to Article 10.2 of the TRIPS Agreement, clarified their copyright protection. As regards multimedia productions, it is clear that they are to be protected under paragraph (1) and/or paragraph (5) of the Berne Convention. The issue of their specific legal characterization is not, however, completely settled (for this, see the corresponding title – "multimedia productions" – in the Glossary below). (See page 27 of the Guide).

[36] *David Greespan, S, Gregory Boyd, Jas Purewal and Mattew Datum:* "Mastering the Game: Business and Legal Issues for Video Game Developers", WIPO publication No. 959 (E), 2014, available at *https://www.wipo.int/edocs/pubdocs/en/copyright/959/wipo_pub_959.pdf.*

Protection of Video Games – Comparative Analysis in National Approaches"[37]. As regards the WIPO Magazine articles, one dealt with video games and was written by one of the co-authors of the just mentioned comparative study published around the time when that study was prepared.[38]

These studies and the article were published in 2013 and 2014, and probably prepared even before. Since then a lot of new technological, distribution-method and legal developments have taken place. Thus, these publications may not reflect precisely, in all aspects, the current situation. Nevertheless, it is worthwhile referring to the above-mentioned comparative analysis, because it is suitable to present the various alternatives and trends of legal classification and protection of video games.

The 2013 WIPO comparative study analyzed the statutory provisions and case law of 24 countries: Argentina, Belgium, Brazil, Canada, China, Denmark, Egypt, France, Germany, India, Israel, Italy, Japan, Kenya, Republic of Korea, Russian Federation, Rwanda, Senegal, Singapore, South Africa, Spain, Sweden, United States of America and Uruguay.

The study summed up the results of the analysis in this way:

> [I]n countries like Argentina, Canada, China, Israel, Italy, the Russian Federation, Singapore, Spain or Uruguay, jurisprudence or scholars consider video games to be, predominantly, computer programs, due to the specific nature of the works and their dependency on software for implementation.
>
> In contrast, other countries, including Belgium, Brazil, Denmark, Egypt, France, Germany, India, Japan, South Africa, Sweden and the United States of America, take into account the tremendous complexity of video games in favoring the hypothesis that video games have a distributive classification. As a consequence, legal protection of the different elements of the game must be found separately, according to the specific nature of each work (i.e., whether it is literary, graphic, audiovisual, etc.).
>
> Finally, a small group of countries, including Kenya and the Republic of Korea, are inclined to think that video games, given their visual elements, are essentially audiovisual works. This does not mean that the software used in

[37] *Andy Ramos, Ms. Laura López, Mr. Anxo Rodríguez, Mr. Tim Meng and Mr. Stan Abrams:* "The Legal Protection of Video Games – Comparative Analysis in National Approaches", WIPO publication, 2013, available at *https://www.wipo.int/export/sites/www/copyright/en/activities/pdf/comparative_analysis_on_video_games.pdf* (hereinafter: the WIPO comparative study).

[38] *Andy Ramos:* "Video Games: Computer Program or Creative Works", WIPO Magazine, 2014, available at *https://www.wipo.int/export/sites/www/copyright/en/activities/pdf/comparative_analysis_on_video_games.pdf*. The title of the article is somewhat strange because it seems to imply that computer programs are not creative works. However, the text of the article itself does not reflect such a position (which if it had been represented, of course, would have been in conflict with Article 10(1) of the TRIPS Agreement, Article 4 of the WCT, the EU Software Directive and a great number of national laws).

> a video game is unprotected in these jurisdictions, but that their audiovisual elements must prevail.[39]

On the basis of the views presented so far in this paper, it is certainly clear that I rather agree with the alternatives adopted in the second and third groups of countries mentioned in the list above. With the position of the countries in second group in that they have opted for "distributive" classification and with the choice of the third group of countries as regards considering the audiovisual-work element of videogames as relevant. There seems to be, however, a quite converging trend to consider video games as complex productions consisting of elements falling into different categories of works – with the underlying computer program (being only one of the components and not being equal to the entire production) and with the creations appearing on the screen qualifying for separate copyright protection (ever more as audiovisual works). The description of the three alternatives above reflects this trend because, although the "distributive" approach is only mentioned specifically concerning the second group, in respect of the first and third groups it is not suggested either that video games necessarily qualify as just computer programs or just as audiovisual works. The WIPO study, concerning the first group of countries, only states that video games are classified "predominantly" (thus, not exclusively) as computer programs, while in the case of the third group, it stresses that, although the "audiovisual elements must prevail", it does not mean that "the software used in a video game is unprotected".

It goes without saying that it has a significant impact on the status of video games how they are classified under the copyright law of a country. This is so because, although there are general provisions applicable to all categories of works, in the case of certain categories of works, also special provisions apply regarding the nature and extent of protection, ownership and transfer of rights, as well as the applicable exceptions and limitations, etc. This is quite relevant for video games because, to the categories having emerged as main options of classification – computer programs, audiovisual works, databases, collective works – several such special rules apply.

VI. Development of case law with growing dominance of "distributive" protection of video games as complex productions; legal consequences of classification

Introductory remarks

The above-mentioned WIPO comparative study – although several years have passed since its publication – outlines the various available options for copyright classification of videogames; however, it does not analyze in a sufficiently detailed manner how those options

[39] Ibid., p. 11.

have been considered and how the current dominant trend ("distributive" classification and protection) has emerged and strengthened. Therefore, in this part of the study, this is reviewed more thoroughly in the case of two countries: the United States and France. The reason for the choice of these countries is not only that one follows the common law tradition, while the other follows the civil law tradition and that both have played decisive roles in the development of copyright both domestically and at the international level, but also because they seem to be the two countries where particularly intensive debates have taken place on these issues.

After reviewing the various options of the copyright classification of video games in these two countries, it is outlined below what may be the consequences of the way in which video games are classified for the protection and exercise of the rights of the creators and producers of the games.

United States

As it is the case with nearly everything in connection with digital online technology, the United States was among the very first countries where video games appeared and, with that, also the questions of their copyright status emerged.

The very first question was whether video games deserved copyright protection at all. If we consider the current sophisticated games, no doubts might emerge about this; what may not be clear is only the classification of the complex productions. However, at the very beginning with the *Pong*-type simple games (see above), it was an understandable reaction of the courts that they did not find the visual effects appearing on the screen suitable to be protected as works. The judgment in the *Atari, Inc. v. Amusement World, Inc.*[40] case adopted in that early period is mentioned quite frequently. It is worthwhile referring to it also because the double nature of the games with technical and artistic aspects – leading later to the ever more general "distributive" classification and protection – emerged in that case already. Atari accused Amusement World that it had plagiarized its *Asteroids* game for the production of its similar *Meteors* game (in both games, the task of the players was to maneuver through the screen without crashing into the symbols of the flying space objects). Atari sought the protection of *Asteroid*s as an audiovisual work (instead of as a computer program); thus, the Court dealt with the claim like that and applying the idea-expression dichotomy, rejected copyright protection finding that both productions had been based on the same simple idea, which directly dictated the expressions chosen without any originality.

In the WIPO comparative study only this judgment and another, also with Atari as the plaintiff – namely *Atari, Inc. v. North American Philips Consumer Electronics Corp.*[41] – is mentioned. The latter is described in this way:

[40] Atari, Inc. v. Amusement World, Inc 547 F. Supp. 222 (D. Md. Nov. 27, 1981).
[41] Atari, Inc. v. North American Philips Consumer Electronics Corp. (672 F.2d 607, 617 (7th Cir.1982).

> Another landmark case was *Atari, Inc. v. North American Philips Consumer Electronics Corp.,* in which the plaintiff accused the American branch of the Dutch company of copyright infringement for creating a video game (called *K.C. Munchkin*) very similar to the famous *Pac-Man*. The court granted a preliminary injunction in favor of Atari as it concluded that Atari had a likelihood of success on the merits, because it held that while a game is not protectable by copyright *as such*, this kind of work of authorship is protectable "*at least to a limited extent* as long as *the particular form in which it is expressed provides something new or additional over the idea*". The court noted that there were many differences between the visual parts of both games, but confirmed that " *it is enough that substantial parts were lifted*", concluding that "*no plagiarist can excuse the wrong by showing how much of his work he did not pirate*".[42]

Thus, in this second case, the court concentrated also on the visual elements, and contrary to the first one, found that *Atari's Pac-Man* fulfilled the criteria of protection due to those elements which were infringed by *Philips's K.C. Munchkin* game.

However, not these Atari judgments were the first in the United States and, by the time they were rendered, it had already been clarified in earlier cases that, independently from the possible protection of computer programs operating the video games, the visual elements may qualify as audiovisual works and may be protected separately as such. In the first Atari judgment mentioned above, the court itself referred to the earlier judgments; namely to *Stern Electronics*[43] and *Midway*[44].

The *Stern Electronic* court has stated so clearly the principle of "distributive" (parallel) protection of the computer programs operating the video games and the moving images appearing on the screen with or without sound which may qualify as audiovisual works – and due to this, it may be regarded the real landmark decision – that it is worthwhile quoting the relevant part of the judgment in a complete manner:

> Defendants point out that Stern has registered the audiovisual material contained in a videotape and has not registered the underlying computer program which dictates and controls the images and sounds contained in the audiovisual display. 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, and this has not been registered.

[42] WIPO comparative study, p. 90.
[43] Stern Electronics, Inc. v. Kaufman, et al., 523 F. Supp. 635 (E.D.N.Y., 1981).
[44] Midway Mfg. Co. v. Drikschneider, et al., 543 F. Supp. 466 (D.Neb., 1981).

> However, copyright protection exists for original "motion pictures and other audiovisual works." 17 U.S.C. § 102(a) (6). "`Audiovisual works' are works that consist of a series of related images which are intrinsically intended to be shown by the use of machines or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied." 17 U.S.C. § 101. Stern's video game, "Scramble," falls within this definition, and presents on a screen a series of images projected by a cathode ray tube which depicts a spaceship simultaneously trying to navigate a mountainous airspace, destroy enemy fuel depots, evade deadly ground fire, and prevail in an aerial dog-fight, while at the same time watching carefully over a diminishing fuel supply. In essence, the work is a movie in which the viewer participates in the action as the fearless pilot controlling the spaceship.
>
> The popularity of a video game depends on the creativity of its audiovisual display, not on the form of its computer program. Indeed, a potential customer does not care about the computer program except insofar as it affects the audiovisual display.
>
> While the audiovisual display emanates from the computer program, it is senseless to say that therefore the display is not original. An author's work does not become any less original after he has found a means to replicate it.
>
> An audiovisual display is an appropriate subject for a copyright even if the underlying computer program is not copyrighted. The program and the display are quite separate in form and function. The identical audiovisual display may be created from many different computer programs, and a slightly modified computer program may produce a wholly different audiovisual display.

Without burdening the volume of the paper with the description of the number of disputes about video games, it is sufficient to mention that this approach continues to be applied in the United States in general (that is, the underlying computer program of a video game is protected as such and the artistic elements of the game as such – in general, at least as regards the current popular games, as audiovisual works). A circular of the United States Copyright Office (USCO) describes this form of "distributive" (parallel) protection in this way:

> A videogame typically contains two major components: audiovisual material that appears on screen and the computer program that runs the game. You can register the audiovisual material for a videogame and the computer pro-

> gram that runs it with one application if the same party owns the copyright in the program and the audiovisual material. If the works have been published, they must have been published together as a single unit. If the program and the audiovisual material were published separately, or if different parties own them, each element is considered a separate work, and you must submit a separate application for each.[45]

France

The WIPO comparative study has characterized the copyright status of video games in France in this way:

> French law, specifically the *French Code of Intellectual Property* (*Code de la Propriété Intellectuelle*) (hereinafter, the "*CIP*"), neither provides a legal classification nor a special regime for video games. Nonetheless, video games can find protection in the *CIP* as per Article L 112-1, which states that "*the provisions of this Code shall protect the rights of authors in all works of the mind, whatever their kind, form of expression, merit or purpose.* " Accordingly, Article L 112-2 includes an open list of works that can be protectable under the *CIP*, including books, musical compositions, graphical works and software, among others (as the *CIP* specifies that these can be, *in particular*, works of the mind).
>
> In this sense, French case law has confirmed that video games can be considered works of the mind (*oeuvre de l'esprit*) and, as such, are protected under the general regime of copyright (*droit d'auteur*). Moreover, jurisprudence recently held that a: " *[…] video game is a complex work that cannot be reduced to its sole software dimension, however significant it may be, so that each of its components is governed by the legal framework applicable to it according to its nature […].*"[46]
>
> Under this distributive approach, a video game is considered a complex creation which is impossible to categorize in one sole pre-existing category, and for which each component must be subject to the legal status applicable to it (e.g., software, music, script or graphics).[47]

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45 Circular 61 of the United States Copyright Office; available at *https://www.copyright.gov/circs/circ61.pdf.*

46 (Original note 74 in the quoted text): Cass. 1re civ., June 25, 2009, Lefranc c/ Sté SESAM, pourvoi n°07-20387; CA Paris, September 26, 2011, Pôle 5, Chambre 12, SARL AAKRO PURE TRONIC et a. c/ NINTENDO, RG n°10/1053. (The footnotes within the footnote left out.)

47 WIPO comparative study, p. 36, point 96.

The description of the French situation is basically correct, except that the distributive nature of the approach is somewhat exaggerated in that not only the difference between the "software" (that is the underlying computer program) and "the rest" (in the sense of the Sirinelli principle mentioned above) is stressed and not only the specific status of music is emphasized (rightly, see below) but the "script" (that is the story line of a game) and the "graphics" are also mentioned separately – suggesting in that way that these elements enjoy copyright protection separately. However, in view of the way the games – in particular those which are typical now as *Call of Duty: Modern Warfare* mentioned above as an example – appear now and are used, it is hardly justified to consider the various creative elements of "the rest" operated by the computer program in such a fragmented way. The "script" is to be understood to mean the scenario and the dialogue, but these creations do not appear separately; they merge together in the production as the scenario and the dialogue are merged together in an audiovisual work and (although their separate use is also conceivable) they enjoy protection as contributions to the entire work. The same may be said about the "graphics" used in the moving pictures appearing on the screens as well as the accompanying music (even if the rights in musical works are traditionally managed separately, as discussed below). This is one of the main reasons why the classification of "the rest" (other than the software) as audiovisual works is justified and, in the case of contemporary video games like the *Call of Duty* series, is in accordance with – follows from – the *Cryo* judgement of the *Cour de cassation* quoted above.

It is worthwhile referring to the findings in *Cryo* in somewhat more in detail for two reasons. First, because the Court dealt specifically with the status of musical works in the repertoire of the French authors' societies SACEM and SDRM managed by SESAM, a joint society established by them; second, because the *Cour de cassation* rejected two possible classifications both of which would have been disadvantageous from the viewpoint of the interest of authors; namely classifying video games either just as computer programs ("software") or as "collective works".

The Court pointed out why Cryo's suggestion according to which video games are just "software" was badly founded: "such a classification appears very restrictive because, although it is exact that the video game includes such a means, it is a complex work appearing by this means with a scenario, images, sounds, musical compositions, etc."[48] It then also rejected the idea of qualifying video games as "collective works": "it is badly founded to oppose the demand of the society SESAM on the basis that collective works are involved *[…]*; the (mechanical) reproduction right to be applied by SESAM in the musical compositions of the members of SACEM is applicable; *[…]* it is possible to accord to the composer dis-

[48] In Cryo, in the original French text: "une telle qualification apparaît bien réductrice alors que, s'il est exact que le jeu vidéo comprend un tel outil, il s'agit d'une œuvre de l'esprit complexe élaborée au moyen de cet outil avec un scénario, des images, des sons, des compositions musicales, etc."

tinct author's rights in his work; a work of collaboration is involved in the sense of articles L. 113-2 and L. 113-3 of the Intellectual Property Code."[49]

However, the French jurisprudence has been more complex than this and the legal literature is also particularly rich. It is worthwhile undertaking a more detailed analysis in order to describe appropriately how the "distributive" approach for the protection of video games has emerged and what it looks like in reality.

The WIPO study has quoted the 2009 judgement of the *Cour de cassation*, which, as the highest court in France, acts as the Supreme Court in the French judicial system. However, when that judgment mentioned in the study was adopted, it was not the first but the third occasion that the court dealt with the question of copyright classification of video games. In 1986, the *Cour de cassation* adopted already a decision on the basic question of whether or not video games deserved copyright protection. The lower court answered the question in the negative based on a mixture of two unjustified reasons; first, that the disputed star-wars-type video game was not sufficiently original (it was) and, second, that what appeared on the screen did not have real aesthetic effect (which was wrong too being in conflict with the principle that copyright protection does not depend on the aesthetic level and merit of productions[50]). The *Cour de cassation* rejected these reasons and declared that the video game concerned corresponded to the criteria in Article L 112-1 of the CIP and, thus, it was a "work of the mind" ("œuvre de l'esprit"). However, the court did not go further; it did not try to classify video games more concretely (in particular, it did not classify them to fall in one or more categories of works mentioned in the non-exclusive list of works in Article L 112-2).[51]

After the *Cour de cassation*, in that way, opened the gates of copyright for the protection of video games, the lower courts tried to experiment with various classifications in accordance with the existing categories listed in Article L 112-2 of the CIP. In 1997, the Appeal Court of Caen classified a video game as "software work" ("œuvre logicielle")[52], while the Appeal Court of Versailles opted for the classification as "collective work" ("œuvre collective")[53]. When, in 2000, the question of copyright classification reached the highest judicial level again, the *Cour de cassastion* classified the video game in question just as

[49] In Cryo, the complete original French text is this: "était mal fondé à opposer à la société Sesam le régime de l'œuvre collective puisqu'en l'espèce, les droits de reproduction revendiqués par la société SESAM portent sur des compositions musicales des adhérents de la SACEM en tant qu'elles sont reproduites dans un programme multimédia ; qu'en effet, la musique ne se fond pas dans l'ensemble que constitue le jeu vidéo, qu'il reste possible d'attribuer au compositeur ses droits d'auteur distincts sur cette œuvre qui, par rapport à ce dernier, est une œuvre de collaboration au sens des articles L. 113-2 et L. 113-3 du Code de la propriété intellectuelle".

[50] This was in clear conflict with Article 112-1 of the IP Code quoted above in the WIPO comparative study under which copyright protection does not depend on "form of expression, merit or purpose" of a work.

[51] Judgment adopted on March 7, in the Atari Inc. v. Valadon (n° 84-93.509) and Williams Electronics Inc. v. Claudie T. et Sté Jeutel (n° 85-91.465) cases.

[52] Judgment of December 19, 1997 in the Annie T. v. Valérie A. case.

[53] Judgment of November 18, 1999 in the Havas Interactive Europe case.

"software"[54]. The somewhat nebulous concept of "software"[55] (rather than the much more unequivocal term of "computer program") probably had contributed to this kind of unilateral and, therefore, inappropriate classification (and also that the judgment was adopted by the criminal chamber of the Court, which wanted to refer to a category specifically listed in Article L 112-2 of the CIP).

This judgment of the criminal chamber of the *Cour de cassation* was strongly criticized in the French legal literature for various reasons. First of all, because the judges had felt to be constrained to classify video games as falling exclusively in one of the categories of works listed in Article L 112-2 of the CIP, although they had been faced with complex productions. Second, in close connection with this, because they had excluded the classification of one of the elements as audiovisual works. The Court had based its rejection of recognizing the audiovisual work aspect of video games due to their non-linear interactive use and the absence of their uniquely determined nature. The commentators pointed out that these arguments had been badly founded. The absence of interactivity or non-linear use is not an element of the definition of audiovisual works in Article L 112-2 of the CIP which reads as follows: "The following shall be considered in particular as works of the mind under this law:… cinematographic works and other works consisting in a series of animated images with or without sounds, to be referred to together as audiovisual works."[56] Furthermore, it is not true that the audiovisual element of a video game is not determined in a way that it could not correspond to the definition just quoted: "animated (moving) images with or without sounds". The audiovisual part includes an underlying scenario and the users ("players") cannot choose any variants but only those which are offered by the creators of the non-software elements of the games.[57]

In 2004, the Court of Appeal of Paris, first, classified a video game as a "collective work"[58] and, then in another case, as an "audiovisual work"[59] and, in 2007, it reverted again to the classification of "collective work"[60] (which, however, as discussed below, similarly to "software" is not an advantageous category from the viewpoint of the creators of video games).

[54] Judgement adopted on June 21, 2000, in the Pierre T. v. Midway Manufacturing Company case (n° 99-85.154).

[55] For the potentially misleading effect of the use of the term "software" instead of the precise term "computer program", see title II above.

[56] The original French text of Article L 112-2 reads as follows: "Sont considérées notamment comme oeuvres de l'esprit au sens de la présente loi: […] Les oeuvres cinématographiques et autres oeuvres consistant dans des séquences animées d'images sonorisées ou non, dénommées ensemble oeuvres audiovisuelles;"

[57] For a detailed description of the rich French legal literature on these issues, see, for example *Benoît Galopin:* "Jeux Vidéo et droit d'auteur", publication of the program of droit du multimédia et de l'informatique, Université de Paris 2 Panthéon, 2003; available at *http://www.glose.org/mem022-htm.htm*.

[58] Judgement of April 2, 2004 in the SA Cryo Interactive Entertainment v. Revillard case.

[59] Judgment of November 10, 2004 in the Sté Microsoft case.

[60] Judgment of September 20, 2007 in the SESAM v. SELAFA MJA et M. L. case.

It was, after this that the above-mentioned judgment of the *Cour de cassation* based on a "distributive" approach in the *Cryo* case (parallel protection of the computer program, on the one hand, and "the rest" on the other hand) was adopted.

Since then this "complex work" approach has been consistently applied in the French case law; for example – for the first time after the guidance given by the *Cour de cassation* in *Cryo* – in a judgment of the Court of Appeal of Paris in 2011 in which it was stated – in a case concerning the application of technological protection measures – that "a video game is a complex work whichcannot be reduced to its only dimension of software, irrespective of how important role it may have, but its other components are subject to a regime in accordance with their nature; in that way for the software part the special status of software, while for the other aspects of the games, such as the audiovisual, graphic and audio aspects, the general copyright norms apply".[61]

The questions of the classification of "the rest" were further discussed. As I have indicated above, it seems that, in the case of the new generation of high quality games with film-type story lines, audiovisual works are becoming the most obvious choice. This has been confirmed also in the extremely rich French legal literature (to which reference has been made above), including two high-level publications: a report prepared for the National Assembly and published in November 2011[62] and a study made for the Ministry of Culture and Education published in February 2013.[63]

Although, in these studies prepared for legislative and administrative bodies, also the idea of including video games explicitly as a new stand-alone category of the non-exhaustive list of works was raised, it became clear on the basis of the analysis made by the experts that (i) video games are complex works for the two elements of which – computer programs operating the games, on the one hand, and the creations appearing on the screens, on the other hand – two different regimes should be applied; and (ii) for the elements other than the computer programs, ever more the application of the category of audiovisual works is justified. The latter aspect was pointed out in the Assembly report in this way:

In the more or less close future, the audiovisual dimension of the video games is becoming decisive in comparison with their software dimension. Therefore, in accordance with the Latin dictum "*accessorium sequitur principale*", the classification of video games as "audiovisual works" could be more and more justified.[64]

61 Judgement of September 26, 2011 in the SARL AAKRO PURE TRONIC v. NINTENDO case.

62 "Mission parlementaire sur le régime juridique du jeu vidéo en droit d'auteur", prepared by a working group, ordered by François Fillon, Prime Minister, through Frédéric Mitterand, Minister of Culture and Communication, presented to the National Assembly by Patrice Martin-Lalande, Member of the Assembly, November 2011 (hereinafter: National Assembly report).

63 "Un régime de propriété littéraire et artistique de la création salariée dans le secteur du jeu vidéo - Mission de médiation relative à la propriété littéraire et artistique de la création de jeux vidéo" prepared by Philippe Chantepie, Secretary General of the Strategic Mission of the Ministry of Culture and Education for the Ministry, February 2013 (hereinafter: Cultural Ministry study).

64 National Assembly report, p. 5.

The reference to the legal principle of "*accessorium sequitur principale*" was extremely relevant for a correct interpretation of the "complex work" approach according to the *Cryo* judgment of the *Cour de cassation*. The judgment refers to various categories of works to be protected in parallel with the software, such as the "script", the "graphics" and the music. These, however, in general become parts (the "*accessorium*") of, and merge together in, the audiovisual work element of video games (in the "*principale*").

Legal consequences of the possible classifications of video games

Let us begin with the three possible classifications, two of which, however, are hardly applicable (and they would not result in a real classification) and one of which, in fact, would not solve the problem: (i) a possible special category to be introduced; (ii) multimedia work; and (iii) to be covered by the general obligation to protect literary and artistic works. As regards the first option, the idea of its application has emerged but was rejected; practically the same may be said about the second one (which appeared in legal literature and copyright policy materials), while the third option is always available of course as a last resort option. However, there is a common problem with all of the three; namely that if any of them were applied, the classification would be far from being complete; the question would still be there what copyright status the underlying computer programs should enjoy and what rules might be applied for the other aspects of the games.

As discussed above, the category of "multimedia works" is of a generic nature; it means practically all productions composed of computer programs to access and operate those elements of the productions which may qualify as literary and/or artistic works. If video games classified as "multimedia works", they would find themselves together with such productions as electronic encyclopedias which, as mentioned above, are fundamentally different; they are searchable and available for non-linear access and use, but without predetermined – although alternative – story lines, and either a primitive or a film-quality scenario. Electronic encyclopedias that may be regarded as "multimedia productions" rather show similarities with electronic databases in the sense that, in the case of the latter, also there is an underlying computer program to use the contents of the database in a searchable manner making it possible to get access to any parts in a non-linear way. In fact, in legal literature, it was also considered whether video games might be classified as databases, but it was not found an appropriate option – exactly due to the story lines and "alternative linearity"[65] of video games. At the same time, it is an important recognition that electronic databases have the above-mentioned similarity to video games as regards their structure composed of two elements: a computer program, on the one hand, and the contents of the database (in the

[65] The term "alternative linearity" refers to the fact that, although the entire story line is not determined in advance and it depends on the way the user plays the game, the story line still develops and it does still within the limits of the alternatives offered by the creators of the game.

use of which, in fact, the program plays a much more significant role than computer programs do in the case of current film-type videogames). It is important to note, because the existing legal provisions on the protection of electronic databases do offer an example how the double nature of such productions may be duly regulated; namely through "distributive" (parallel) protection as provided, for example, in Article 1(3) of the Database Directive.[66]

In legal literature and judicial case law (however, in the key countries, rather just in the earlier stage of development of video games), the idea of classifying the entirety of video games exclusively just as computer programs (sometimes referred to by the nebulous term "software") did emerge. However the use of this option is fading away, since the reality of video games (in particular the current movie-quality productions) obviously does not correspond to such unitary classification, and also because the specific provisions on computer programs, in general, are much less advantageous for the creators of video games than the protection of "the rest" of the games in accordance with the general copyright provisions (in respect of original ownership and transfer of rights, the status of employed authors, the coverage of rights – both moral and economic – or the mandatory and optional exceptions and limitations, etc.).

Thus, there is an ever more dominant trend of "distributive" classification with parallel protection of the computer programs ("software") and "the rest" qualifying as literary and/or artistic works. For "the rest", two main classifications have emerged: protection as "collective works" or as "audiovisual works" with a growing preference, however, for the latter, in particular as regards the complex games of a narrative nature ever more similar to "traditional movies". Protection of such video games as audiovisual works is also more preferable for video game creators (usually only with rebuttable presumption of transfer of rights, which may not even extend to musical works, with certain unwaivable rights to remuneration frequently combined with mandatory collective management, longer term of protection, etc.) than protection as collective works (with automatic original ownership of rights of a legal entity or physical person other than the actual authors; not mentioning the fact that the category of "collective works" does not exist in many copyright laws and, where it exists, as a rule it does not cover audiovisual works for which *lex specialis* norms apply). Although the classification of "the rest" (other than the computer program) as audiovisual works is ever more justified, still there are certain types of games where other categories of works are also applicable. Of course, this is the case as regards the protection of musical works where video games include music (they form parts of the sound track of a video game, but in the case of certain types of games – such as, for example, *Guitar hero* or virtual dance games – they play a much more decisive role). Furthermore, there are still certain more "traditional" games where the originality of the "rest" may rather be manifested in

[66] As quoted above, Article 1(3) of the Directive reads as follows: "Protection under this Directive shall not apply to computer programs used in the making or operation of databases accessible by electronic means."

the graphic elements; thus, protection as works of art may also be justified. In the following parts of the study, the role and protection of the just mentioned two key categories of works – audiovisual works and musical works forming parts of the protectable "rest" – are discussed somewhat more in detail.

VII. Growing importance of the audiovisual elements of video games

The international treaties on copyright do not contain a definition of cinematographic works or audiovisual works – except a suspended WIPO treaty; namely the Treaty on the International Registration of Audiovisual Works (Film Register Treaty) which was adopted in 1989, entered into force in 1991, but then, due to the resistance of the Hollywood studios, its functioning was suspended.[67] Article 2 of the Treaty defined "audiovisual work" in this way:

> For the purposes of this Treaty, "audiovisual work" means any work that consists of a series of fixed related images, with or without accompanying sound, susceptible of being made visible and, where accompanied by sound, susceptible of being made audible.

One may point to the adjective "fixed" and claim that, since the audiovisual elements of video games are not fixed in a unique manner, they would not pass as audiovisual works. It should be seen, however, that the definition only served the purpose of registration of audiovisual works and the Treaty foresaw the deposit of a fixed copy of such a work. Although Article 2(2) of the Berne Convention allows the determination of fixation of a work as a condition of copyright protection, it is not a general condition under the Convention. Furthermore, even in countries where fixation is a condition, it is not an obstacle to protect the non-computer-program elements of video games as audiovisual works, since the concept of fixation is applied in a flexible way (more strictly only for the purpose of registration in the US Copyright Office) and, for example, the definition in section 101 of the US Copyright Act is suitable for such classification of the visual aspects (accompanied or not by music or other sound):

> "Audiovisual works" are works that consist of a series of related images which are intrinsically intended to be shown by the use of machines, or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied.

[67] See its text on WIPO's website at *https://www.wipo.int/treaties/en/other_treaties.html*.

The same applies to the definition in Article 112-2 of the French IP Code – "a series of animated images with or without sounds" – which, as discussed above, extends without any problem whatsoever to video games, but also to the definition in Article 86(1) of the Spanish IP Law (TRPI):

> The provisions enacted under this Title shall be applicable to cinematographic and other audiovisual works, understood as being creations expressed by means of a series of associated images, with or without incorporated sound, that are intended essentially to be shown by means of a projection apparatus or any other means of communication to the public of the images and of the sound, regardless of the nature of the physical media in which the said works are embodied.[68]

The audiovisual parts of the video games do qualify as "a series of related images, with or without incorporated sound", which is the truly substantive element of the Spanish definition. It is true that "projection" is referred to as one of the "essentially" intended uses, but any other forms of communication to the public are also mentioned (including making available of the works online in digital format, which is the case also as regards many audiovisual works other than the audiovisual parts of videogames; never "projected" in a traditional manner).

There were two reasons for which certain doubts emerged about the classification of the non-computer-program aspects of video games as audiovisual works. The first one was the interactive way of using the games (and, therefore, the not fully determined nature of what appears on the screen as a "gameplay"; that is, the way the sequence of images follow each other on the screen). The second one was the alleged non-linear use of the games. However, neither of the two reasons for doubts has turned out to be well-founded. As discussed above, in the various definitions of "audiovisual works", the absence of interactivity or the fully predetermined nature of the sequence of images is not a condition. However, it is not true either that video games are not determined at all; the possibility of their interactive use is relative and limited; the users ("gamers") may choose different directions in the story line, but the various alternatives for the different directions are determined in the production. In close relation with the way a video game may be played, there is definitely linearity in the "gameplay"; it is developed by using the said (alternative but not unlimited) options built in the video game (see the concept of "alternative linearity" above).

[68] The original Spanish text is this: "Las disposiciones contenidas en el presente Título serán de aplicación a las obras cinematográficas y demás obras audiovisuales, entendiendo por tales las creaciones expresadas mediante una serie de imágenes asociadas, con o sin sonorización incorporada, que estén destinadas esencialmente a ser mostradas a través de aparatos de proyección o por cualquier otro medio de comunicación pública de la imagen y del sonido, con independencia de la naturaleza de los soportes materiales de dichas obras."

It should be added – and this is quite relevant – that the similarities between "traditional" audiovisual works and the audiovisual element of video games (the way they appear on the screen in the form of "gameplay") are ever stronger; so much so that the differences are fading away. According to the saying, if something looks like a duck, walks like a duck and quacks like a duck, there is good reason to consider it a duck. This is true for the "gameplays" of video games too: they look like audiovisual works, they unfold on the screen as audiovisual works and they also look like and sound now ever more as audiovisual works; it is justified to classify those non-computer-program elements of the games – with narratives story lines, expressions of objectives, emotions and feelings – as audiovisual works.

There are manifestations of these converging trends also in the form of a number of popular films transformed into video games with the same figures and features[69], and *vice versa*, also several successful video games are adapted into "traditional" movies.[70] Even famous actors play in video games, and now not only as "voice actors", but appearing in person in the games with performances in the alternative scenario elements.[71] (For example, Kiefer Sutherland, who had become world famous in the *24* series, played the role of *Snake* in the *Metal Gear Solid V* video game; Martin Sheen known from *Apocalypse Now* acted in the role of *Cerberus* in the *Mass Effect* game series; Jeff Goldblum, the actor of *Jurassic Park* and *Independence Day* played in a version of the *Call of Duty* series (*Call of Duty: Black Ops 3*). The developer and publisher of the series (Infinity Ward and Activision) frequently use known actors in their games. The most famous appearance of an actor in their games took place in *Call of Duty: Advanced Warfare* where Oscar-winner Kevin Spacey played the role of *Jonathan Irons*, the head of a private military organization[72] – until his sex scandal erupted, when he was replaced by another Oscar winner, Tom Hanks[73].

It follows from this that the copyright provisions on audiovisual works should be applied for the audiovisual elements of such games (like the provisions on computer programs for the "software" element). That is, all the provisions on original ownership of rights, transfer of rights, the scope of moral and economic rights, the applicability of exceptions and limitations, etc. – both the general copyright provisions and the specific ones applicable just to audiovisual works. The identification of the co-authors of the audiovisual elements of the games may hardly create any problems; there are directors, scenario and dialogue writers,

69 See "List of video games based on films" at *https://en.wikipedia.org/wiki/List_of_video_games_based_on_films*.

70 See "List of films based on video games" at *https://en.wikipedia.org/wiki/List_of_films_based_on_video_games*.

71 See *Rob Leane:* "How Acting and Video Games Are Merging" at *https://www.backstage.com/uk/magazine/article/how-acting-video-games-are-merging-in-the-uk-and-beyond-69242/*.

72 See *Chris Reed:* "15 Celebrities Who Have Appeared in Video Games", at *https://www.cheatsheet.com/technology/9-memorable-celebrity-appearances-in-video-games.html/*.

73 *Jeremy Kaplowitz:* "New Patch Replaces Kevin Spacey in Call of Duty: Advanced Warfare with Tom Hanks" at *https://thehardtimes.net/harddrive/new-patch-replaces-kevin-spacey-call-duty-advanced-warfare-tom-hanks/*.

and composers of the accompanying music. It is not a problem that there are also other creators typical for video games (this also happens with certain "traditional" audiovisual works; see, for example, cartoon movies). The provisions on presumption of transfer of rights may and do apply (and the economic rights of the authors are usually transferred to the game developers and publishers) but the special status of musical works, with the "performing" rights (which are usually retained for collective management) is supposed to be applied too, as well as certain unwaivable rights – and not only moral rights but also different rights to remuneration, such as for private copying or residual rights (as provided, for example, for rental in Article 5 of the Rental Directive (Directive 2006/115/EC)).

VIII. New ways of using video games (streaming, making available recorded "gameplays", e-sport, etc.)

As long as video games were played on specially installed machines or on consoles by one or two players, the identification and exercise of rights were still relatively simple. Much has changed, however, when the distribution and use of video games began migrating first to the Internet and then, ever more, to mobile devices. The classification of certain uses – such as online distribution of games (now also through cloud services) in the sense that it is covered by the right of interactive making available to the public – is still relatively easy, and the application of the rights may not be too problematic. However, new forms of exploitation have also emerged where the use of the games does not take place in the traditional form just playing, but it is the result of the playing – the "gameplay" – is the object of utilization; the gameplays are communicated and made available to the public either through live streaming or on-demand streaming in the form of recorded gameplays. That is, in such a way, the members of the public do not play but rather only watch video games as played by others either live or through fixations. E-sport events attract a huge public where teams play against each other.

There are websites – such as Twitch and Google Play – where gameplays are made available in a way similar to the making available of "traditional" audiovisual works and phonograms (with musical works of authors and performances of performing artists included) through such websites as YouTube. As a result, due to the activities of these platforms, a "value gap" has emerged to the detriment of rightsholders the same way as it has become so obvious in the case of YouTube-type platforms. These video game platforms do qualify as online content-sharing service providers (OCSSPs) under Article 2(6) of the Digital Single Market Directive (Directive (EU) 2019/790); consequently, the provisions of Article 17 on the obligations and liabilities of OCSSPs are supposed to apply to them.

The rights of the authors of the audiovisual elements of the games are usually transferred to the developers (who have the same roles as producers of films). Thus, in general, they are

owners of rights concerning these uses, too. There are, however as mentioned above, cases where authors have unwaivable rights to remuneration and the authors of musical works normally retain their "performing" (public performance and communication to the public) rights to be exercised by their collective management organizations. In the following part of the study, especially the role of music in video games and the application of the rights of authors of musical works are discussed.

IX. The role of music in the creation and use of video games; licensing by collective management organizations

Let me begin with the description of the quickly increasing role of music in video games along with a warning that an appropriate reaction by the creators and the music industry is still missing. They have not recognized yet their potential and that they are losing a big amount of revenues which would be due to them if they exploited their rights properly. Mat Ombler, a journalist and commentator specialized in analyzing the dramatic developments in the video game industry, published an article on these problems earlier this year – in March 2020 – with the telling title and subtitle: "Six ways video game composers are missing out on money - Video game music is more accessible than ever before, but a lack of business knowledge among composers means money is being left on the table"[74].

At the beginning of the article, the breath-taking developments are summed up briefly in this way:

> You don't need to blow the dust off of your Super Nintendo or PlayStation to revisit your favourite video game soundtracks. The music of that era is more accessible now than ever before, and it has never been in greater demand. The most popular scores reach millions – or even tens of millions – of plays on digital platforms such as Spotify and YouTube, with publishers like Square Enix rushing to meet the demand by making their back catalogues available.
>
> Exciting new formats have allowed music to outlive the games it was originally written for – whether that's digital tracks from old video games such as Final Fantasy 5, The Legend of Zelda: Link's Awakening being rearranged for performances by the Royal Philharmonic Orchestra, or the soundtracks from Streets of Rage and Shinobi being remastered and released as vinyl records. Some of the world's biggest music stars – such as *Jay-Z*, *Childish Gambino* and *Wiz Khalifa* -- have sampled video game music in their tracks, while music from Final Fantasy VII is *played in the ad-breaks to millions of people* on the Late Show with Stephen Colbert.

[74] See at *https://www.gamesindustry.biz/articles/2020-03-02-six-ways-video-game-composers-are-missing-out-on-money*.

> Royalties are usually generated in instances such as those mentioned above. However, there are a number of things that video game composers must do if they want to benefit from the usage of their music in the media.

Mat Omber – on the basis of a thorough review of the various problems and the possible solutions and of interviews with key representatives of the interested stakeholders – lists the following six reasons for which "video game composers are missing out on money": (i) "composers aren't set up to collect their royalties"; (ii) "education needs to improve – particularly among younger composers"; (iii) "digital platforms make identifying creators difficult"; (iv) "games publishers aren't working with music publishers"; (v) "composers are not taking legal advice on contracts"; and (vi) "the music industry isn't paying enough attention". The problems mentioned under (i), (ii), (v) and (vi) are closely related and, for all of them – directly or indirectly – collective management of copyright seems to be the right solution.

The author quotes the figures of the "Game Audio Industry Survey 2019"[75] according to which only, at maximum, 33% of the composers of music works specifically for video games are registered with a collective management organization. The situation is better when pre-existent music is used for the games, because the composers of those works are usually members of, or are otherwise represented by, collective management organizations. The problems mentioned by Omber mainly emerge for those who have specialized in creating video game music and among them, in particular, for the younger generation of composers. He points out the main reasons: concluding contracts without being duly informed what rights are transferred and under what conditions; only keeping in mind certain traditional uses (reproduction, offline and download-based online distribution) and obtaining remuneration only mainly for those; at the same time forgetting – or being uninformed about – several other rights, such as communication to the public, public performance, interactive streaming, and the use of music through publishing the soundtracks of the games separately.

The example of Sarah Schachner – a *BMI* member, the composer of one of the latest successful video games *Call of Duty: Modern Warfare* mentioned in the Introduction above – shows what a great advantage it is to join a collective management organization and to develop due cooperation with the music industry (through which the "performing rights" – in a broader sense – may be duly exploited). She is also the composer of the high-quality music used in the *Assassin's Creed* video game series, a popular action-adventure *Ubisoft* production, the first version of which was released in 2007 and the last one in 2018. *BMI* takes care of the management of her rights, which due to the great success of her music, cover not only the use of the music in the form of public performance and communication to the public as a part of gameplays, and not only through distribution of copies of the soundtracks (managed separately as mechanical rights), but also the public performance

[75] Published on the GameSoundCon's website at *https://www.gamesoundcon.com/post/2019/09/10/game-audio-industry-survey-2019.*

of her musical works – originally created for the games – in concerts. There is now an *Assassin's Creed Symphony* program for public performance of Schachner's classic *Assassin's Creed* music with the participation of a symphony orchestra, a choir, along with a 3D multimedia backdrop. It was premiered in June 2019 in Los Angeles and in the same month also in Paris; and with that an international tour began. Several concerts were foreseen in the first half of 2020 too to take place in various European countries, which, however, due to the corona virus pandemic, have been cancelled.[76]

The use of musical works created specifically for games or being "synchronized" for them are getting ever more important, but – since new forms of exploitations are involved – their legal classification has not been fully done yet (if at all), the rights involved have not been phased in and, where attempts are made to exercise the rights concerned, the users – who have been accustomed to utilize the works freely and just enjoy the revenue – strongly resist the steps taken in order to try to apply the rights. The rights to be applied for a number of different ways of using video games require clarification; namely that (i) online live streaming of gameplays is communication to the public; (ii) online distribution of recorded gameplays is covered by the right of interactive making available to the public; (iii) playing video games at big e-sport events in the presence of a huge public is public performance; (iv) broadcasting and live streaming of the artistic and musical parts of video games in the form of gameplays at such events or the making available of their recorded versions are covered by the relevant copyright provisions (including, as clarified now in Article 17 of the DSM Directive, when the interactive making available of video games takes place by such OCSSPs as Twitch or Google Play); (v) there is a big difference between broadcasting or otherwise communicating to the public of a traditional sport event (like a football match) with a running commentator, on the one hand and, on the other, doing the same concerning an e-sport event or the gameplays of some "gamers" as it is happening for example through the "Let's play" platform (because, the movements made by football players are not protected, but the playing of video games does involve the use of works protected by copyright both as regards audiovisual gameplays (or "playthroughs") and the accompanying music).

Those who have enjoyed so far free use of works protected by copyright receive it as "bad news" that they should respect the right of authors and – *horribile dictu* – pay a modest fee for the use of the musical works embodied the games. Thus, it was not a surprise how big an indignation erupted when the French authors' society SACEM began the application of its members' rights in the music used at big e-sport events.[77]

[76] See *https://assassinscreedsymphony.com/* and *https://assassinscreed.fandom.com/wiki/Assassin%27s_Creed_Symphony.*

[77] See "La SACEM s'attaque aux musiques de jeux vidéo diffusées dans les tournois e-sport" at *https://www.google.com/search?client=firefox-b-d&q=La+SACEM+s%27attaque+aux+musiques+de+jeux+vid%C3%A9o+diffus%C3%A9es+dans+les+tournois+e-sport;* and "La SACEM réclame sa part du gâteau sur la musique de jeux vidéo" at *https://www.journaldugeek.com/2017/02/07/sacem-veille-tournois-e-sport/*.

Such waves of uninformed attacks against the rights of creators show that intensive awareness building is needed both among the users of works and the members of the general public – but perhaps even more among the composers and other creators themselves to make it clear that their rights do not cease to apply just because the same kinds of exploitation of their works migrate to other media. The collective management organizations are supposed to play an important role in this, in order to assist the creative community in trying to eliminate the unjustified value gaps existing to their detriment.

X. Borderline area of permitted uses and infringements ("clones", "mods", "machinima" versions, etc.); the use of technological protection measures and their circumvention by "modchips"

It goes without saying that the right of adaptation also applies to the creative content of video games. There are, of course, certain exceptions and limitations applicable for some types of transformations of video games; for example, parodies are allowed as now they are also covered by one of obligatorily transposable exceptions under Article 17(7) of the DSM Directive. However, a great number of versions of video games appear in the online environment that are based on existing works both in the form of straight copying of successful games, at maximum with some minor changes (by which the rights of copyright owners are obviously infringed) and of less significant modifications.

The major game developers and publishers use technological measures, including by means of chips built in their proprietary consoles the use of which is only available to their own games and some others where it is guaranteed that they do not infringe copyright. Such hardware-based protection is sometimes circumvented by means of "modchips" removing the proprietary nature of the devices. The excuse for using "modchips" is to make the devices suitable to be used for any video games (in principle also those which may not be infringing). However, through such "modchips", the technological protection applied by the developers and publishers is completely removed and frequently the objective is just to get access to unauthorized copying of video games. The CJEU dealt with issues of using such "modchips" in the *Nintendo v. PC Box Srl* case[78] and adopted the following judgment:

> Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 [the InfoSoc Directive] must be interpreted as meaning that the concept of an 'effective technological measure', for the purposes of Article 6(3) of that directive, is capable of covering technological measures comprising, principally, equipping not only the housing system containing the protected work, such as the videogame, with a recognition device in order to protect it against acts not authorised by the holder of any copyright, but also

[78] Nintendo v. PC Box Srl, Case-355/12 (January 23, 2014).

> portable equipment or consoles intended to ensure access to those games and their use.
>
> It is for the national court to determine whether other measures or measures which are not installed in consoles could cause less interference with the activities of third parties or limitations to those activities, while still providing comparable protection of the rightholder's rights. [The Court than offers guidance as to what kind of criteria should be taken into account to establish the right balance between the interests of rightholders using the protection measures and the creators of non-infringing video games.]

The modified versions of video games are often at the borderline of legitimate uses and infringements. Sometimes they are referred to as "clones", in the case of which, if there is no authorization for their making, the use is quite obviously infringing and sometimes takes the form of "mods" – usually produced by the "gamers" –, which include more or less significant modifications not necessarily with the intention to commit clear-cut infringements. The latter modifications are at the borderline between lawful uses and infringements – in two senses. First, it depends on the nature and extent of the changes whether or not they still may be regarded as a normal way of using the video games. Second, it depends on whether or not rightholders – in respect of the key elements of the games, usually the developers and the publishers – do exercise their rights of adaptation (which they, in general, confirm in the licensing agreements, in particular for the cases where such "mods" are used for commercial purposes).

Quite frequently, the developers and publishers allow free utilization of adapted versions of their video games (although, in principle, they could oppose them on the basis of the right of adaptations), even where it involves a certain level of commercial purposes. This is a matter of business calculation; through this – if it takes place within well-controlled limits – they may increase the popularity of their games and fan enthusiasm. Sometimes they go so far as to tolerate even the production and distribution of "machinima" versions (the term has been coined of "machine", referring to the originally machine- and technology-based nature of video games and "cinema", since such versions, in fact, are audiovisual works in which the figures and story elements of video games are used).

However, there may be conflicts between such business interests and the moral and economic interests and rights of the creators. Therefore, the co-authors of the games should pay special attention also to the transformative uses of their works when they conclude contracts with the developers and publishers, and should take care of protecting and exercising their rights that they may succeed to reserve.

XI. Conclusions

1) *The economic and cultural importance of video games is spectacularly increasing; it is already on the same level as films and other audiovisual works. Therefore, the importance of the clarification of the copyright status of the video games has also increased.*
2) *In the international treaties, EU legislation and national copyright laws, there are no specific provisions on the concept and protection of video games; these issues so far have been addressed mainly in judicial case law and the legal literature.*
3) *Certain ideas have emerged to introduce video games as a new category in the non-exclusive list of literary and artistic works or to protect them as "multimedia works". However, the issues of classification and the basic aspects of the protection of video games would not be settled by either of these solutions, since video games are of a double nature. They contain various artistic elements appearing on the screen when they are played and computer programs operating them, allowing their use in an interactive way.*
4) *In principle, it might be justified to consider video games as "multimedia works", but it should be seen that this is a generic category in which the common structure of multimedia productions is that they include digitized materials suitable for copyright protection, on the one hand, and, on the other hand, computer programs to make the use of those materials possible in an interactive way. In that sense, video games would be in the same category with different other kinds of productions, such as electronic encyclopedias (which are searchable and may be used in a non-linear way). In fact, since the essence of such productions is that they always include an underlying computer program and something else – "the rest" – to be protected, they are in the same family of productions as electronic databases. The example of the protection of such databases shows that it is justified to protect the computer programs and the protectable "rest" in parallel (in a "distributive" rather than unitary manner). At the same time, classifying video games as databases or collections would not be appropriate because the interactivity of databases and video games basically differ; electronic databases are searchable and may be used in a non-linear manner but they do not have any narrative aspects, while video games are of a narrative nature – either at a primitive level or at the same high level as films – and they are normally used in the form of "alternative linearity", developing a story line through choosing from among the various options built in them by the creators.*
5) *In certain stages of case law development, there was an attempt to try to classify video games as "collective works". This has not turned out to be the right solution because this category (which otherwise does not exist under the national laws of many countries) is too broad and it is based just on the nature of the creative process and the number of contributors acting together under the control of a physical person or (more typically) of a legal entity, such as a publisher. It is not suitable to take into account the genre-specific aspects – and certainly not the double nature – of video games. Such classification would be also*

disadvantageous from the viewpoint of creators due to the specific rules on original ownership, transfer, scope and exercise of rights in "collective works".

6) *It is ever more generally recognized that, at least for the time being (and the time dimension seems to be quite broad), parallel, "distributive" – rather than unitary – protection is justified for video games (in that aspect, similar to the status of electronic databases) through the protection of the computer programs operating the game and the protection of "the rest" according to the rules of protection of these two categories.*
7) *There are also video games where, in the protectable "rest" – that is the elements other than the underlying computer programs – musical works or graphic works dominate but, in the case of the modern, popular video games, in general, the classification of the "rest" as audiovisual works seems to be appropriate – the more so because the similarities between such video games and "traditional" films are becoming ever more emphatic.*
8) *From the classification of the non-computer-program elements of the video games as audiovisual works, it follows that the specific copyright provisions on such works should be applied; including concerning the original ownership of rights, the transfer of rights (along with the usual special treatment of the "performing rights" in musical works to be exercised through collective management organizations), the scope of rights, along with the permitted exceptions and limitations, and, where they exist, the unwaivable right to remuneration maintained for the authors and performers, etc.*
9) *Special attention should be paid to the new ways of using and exploiting video games emerging as a result of the migration of their uses from consoles and PCs to online systems and mobile devices. It should be clarified, for example, that (i) live streaming of "gameplays" is covered by the right of communication to the public, (ii) for the online distribution of recorded "gameplays", the right of interactive making available to the public applies, and (iii) the use of video games (at least certain elements thereof, in particular musical works) at e-sport events in the presence of a public, the right of public performance is applicable.*
10) *Musical works have an ever more significant role in modern video games. Existing works are also synchronized for certain games, but it is quite frequent that music is created specifically for the games. Video game music is often of such a high quality and becomes so popular that the soundtracks are published separately and live concerts take place where game music is played, sometimes even with the participation of symphonic orchestras. However, many video game composers are not aware of their "performing rights" and have not yet joined collective management organizations to take care of the exercise thereof. As a consequence, they do not exploit their rights to the extent to which the great potential of those rights would make it possible. The users of the games and the members of the general public are not aware either of the obligations concerning the "performing rights" in video games. Increased efforts should be made to clarify the applicability of those rights for streaming and other online services and, specifically, for the use of music at e-sport events. This should be coupled with intensive awareness raising campaigns – in which also the*

creators of video game music should be targeted. In all this, collective management organizations should obviously play a decisive role.

11) *With the migration of video games to the Internet, to the "Cloud" and to mobile devices, their use is becoming ever more popular and the danger of unauthorized uses – directly or in the form of "clones" – is increasing (against which certain developers and publishers try to apply user-friendly technological protection measures). Modifications are also made in the games, frequently by the "gamers" themselves, which may reach such a level that the application of the right of adaptation might be justified. Nevertheless, developers and publishers – as a matter of business strategy calculations – frequently allow "mods" and even "machinima" versions (the latter meaning the use of the characters and other elements of the games for the making of specific traditional-film-type versions). Such business considerations may not be in accordance with the moral and economic interests and rights of the creators. Therefore, they should pay specific attention to trying to reserve for themselves the relevant transformative rights, and to take care of the exercise thereof in the course of the use of the games.*

12) *The copyright status and protection of video games, at present, are not on the agenda of international or EU bodies. There does not seem to be an urgent need to deal with this topic at that level. If international or EU bodies still intend to deal with these issues, for the time being, it seems to be justified to do so just in the form of offering guidance and outlining best practices.*