Copyright protection of multimedia

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Should a multimedia category be introduced into Australian copyright law?

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Multimedia is often heralded as the technology of the moment. As a relatively new and unexplored technology, creators and users of multimedia are eager to know the limits of its legal protection. An important question, which is the focus of this article, is whether multimedia as an entirety has copyright protection in Australia. This article will assess this question by looking at the extent of copyright protection of computer programs, databases, films and the proposed protection of transmissions to the public and will discuss whether a new multimedia category should be established.

Before proceeding, it is worth defining multimedia. It refers to a computer program which combines various media forms, such as audio, video, image, animation, graphics and text, into a single digital form and which allows the user to navigate through the information and access it in a way which suits his or her needs (called interactivity).[1]

When we say that multimedia is in digital form, we mean that the information which forms a part of it and the program which underlies it are in binary code. However, it is possible to characterise digital forms at a higher level and to differentiate between them. There are fixed or carrier based forms, such as CD Roms, CD-I disks and point of information terminals. There are also remote access forms, such as on-line applications, which may be available via the Internet or through a closed network, and cable network transmissions. Multimedia thus covers a wide spectrum of technology, a spectrum which may further expand as technology develops.

Computer program

The computer program which powers any multimedia will undoubtedly have copyright protection,[2] but is it possible to protect the entirety of the multimedia work as a computer program? The difficulty is that the copyrightable expression is usually the source or object code and does not extend to the program's structure, its design features, its screen display or the stored data on which the program is acting.[3] Therefore, the navigational, hypertext or interface aspects which are critical to multimedia's interactivity are not protected and neither are the individual materials which comprise the multimedia. Using the 'computer program' category seems to be an inadequate means of protecting the multimedia whole.

The interactive aspects of multimedia could gain protection as a computer program if the United States approach to infringement of computer programs, as represented in *Computer Associates v Altai* 982 F 2d 693 (2nd Cir. 1992), was adopted. It was decided in *Altai* that a computer program may extend beyond its program codes to its non-literal elements. According to that case, the protectable non-literal expression is ascertained by breaking the program into its various levels of abstraction, from code to an articulation of the program's ultimate function. The structural components at each level of abstraction are then examined to determine whether it is an idea or expression.

A core of protectable expression remains which is compared with the core of the allegedly infringing program to judge whether it is substantially similar and in fact infringing.

The *Altai* approach should be adopted in Australia because it accurately reflects the nature of a computer program as a composite of interacting subroutines each having their own idea which builds towards an ultimate function. It also applies a sensible test to determining which non-literal aspects of a computer program should be protected. Through this approach, some of the structure, sequence and organisation of a computer program will be protected and this will allow some of the interactive qualities of multimedia to be protected.

Database

Strong support for protecting multimedia as databases is evidenced by the recent EC Database Directive, 96/9, 11 March 1996.[4] In Australia, the most likely form of protection of databases is as a compilation.[5]

Protection as a compilation occurs if there has been sufficient originality in the *selection* or *arrangement* of materials.[6] In those multimedia databases which rely on exhaustiveness as their selling point, it may be difficult to satisfy this *de minimis* rule. There will have been no selection as such but merely an exhaustive accumulation of material. While there may have been a substantial expenditure of effort put into collecting the vast material, there might not have been enough skill and discrimination in combining those materials to satisfy the rule.

The notion of arrangement has two possible interpretations which both cause problems for multimedia. If *arrangement* refers to the physical ordering of the database contents, then this is dictated by the computer software and is not determined by the maker of the database. If *arrangement* means the presentation of the contents to the user, then arguably it is the user who chooses which material he or she views and in what order. The user's choice will be shaped by the hypertext links and searching mechanisms of the software.

Infringement of a database only occurs if the *selection* or *arrangement* of materials is substantially copied. Thus, the content of the multimedia database is not protected, except to the extent that individual parts of the database have their own copyright.

If a scheme similar to the one set out in the EC Database Directive is implemented in Australia the difficulties identified above could be ameliorated. The Directive clarifies that a database is a compilation for the purpose of copyright protection. A clarification of the Australian position in this manner is desirable. This can be achieved either by amending the definition of compilation to include databases in an electronic form or, alternatively, if Australia becomes a signatory to the recent WIPO Copyright Treaty, this will occur impliedly.

The Directive also proposes a *sui generis* right, distinct from copyright, for databases which have had, either qualitatively or quantitatively, substantial investment in their creation (article 7(1)). The Directive prohibits the *extraction* or *re-utilisation* of the whole or substantial part of the contents of a database (article 7(1) and (2)). Article 7(2) defines *extraction* and *re-utilisation* respectively as:

> the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form;
>
> any form of making available to the public all or a substantial part of the contents of a database by the distribution of copies, by renting, by on-line or other forms of transmission.

The right occurs independently of copyright in the entire database or copyright in individual sections (Article 7(4)) and the duration of protection is 15 years (article 10(1)), with any substantial change to the contents of a database triggering a further 15-year term (article 10(3)).

The advantage of the *sui generis* right is that it is a means of protecting databases which fail to meet the originality standard and it protects the whole of the contents and not just the *selection* or *arrangement* of materials. It deals with databases as a matter of unfair competition, which certain critics believe is the proper realm for databases,[7] and does not stretch copyright law out of shape in order to protect significant commercial efforts. A *sui generis* right significantly improves the protection of multimedia databases and should also be implemented in Australia.[8]

Copyright and *sui generis* protection of a database will not protect all multimedia works since not all of them are compilations. Virtual encyclopedia libraries, film libraries or music libraries may be compilations, but multimedia works expand beyond this realm. Multimedia may also be used for education, training, infotainment and entertainment.[9] In those applications, there is some 'database' of information, but this is not the main feature of the program. This is an example of how the broad range of multimedia acts to its disadvantage in gaining protection through the one route.

Cinematograph film

The Copyright Law Review Committee (CLRC) in its *Report on Computer Software Protection*, 1995 was of the opinion that relying on the category of cinematograph film was the best means of extending copyright protection to multimedia. Section 10(1) of the *Copyright Act 1968* (Cth) defines cinematograph film to mean:

> the aggregate of the visual images embodied in an article or thing so as to be capable by the use of that article or thing:
>
> (a) of being shown as a moving picture; or
>
> (b) of being embodied in another article or thing by the use of which it can be so shown;
>
> and includes the aggregate of the sounds embodied in a sound track associated with such visual images.

In terms of the scope of media protected by film, both visual images, provided they are capable of being shown as a moving picture, and sounds are included. Visual images would presumably be broad enough to cover text, video, drawings, animation, graphics and photographs. The real issue is whether such images will always be 'capable of being shown as a moving picture'.[10] The CLRC expressed the view that still images would not deprive a multimedia program of protection (para. 14.84). The CLRC stated there are 'plenty of examples of films and TV programs that have consisted of collages of moving and still pictures with accompanying sound' (para. 14.86) and 'it does not seem that interacting with a multi-media production is different in essence from editing a celluloid film, so much as making it infinitely more possible to modify the multi-media production in an infinite variety of ways' (para. 14.86).

The above statements of the CLRC fail to recognise that multimedia does not work in a linear way, but rather works on a random access principle.[11] Some multimedia, such as reference multimedia, are more non-linear than others. It is highly likely that, in the future, the degree of non-linearity will increase as multimedia becomes more sophisticated. Multimedia is not a matter of a *continuous* mix of video, audio and data which can be chopped and changed to suit one's needs or which has a few still images inserted. It is a body of information which can be approached and expanded in a variety of different ways and from a variety of different angles. In addition, as multimedia advances, and information from the user can be added to that original body of information, then the concept of films will move further away from that of multimedia.

In the recent case of *Sega Enterprises Ltd v Galaxy Electronics Pty Ltd* [1996] 761 FCA 1, August 1996, the requirement that a film is 'capable of being shown as a moving picture' was not raised by Burchett J as an obstacle to protecting a multimedia video game as a film. Perhaps the reason why this requirement was assumed to be satisfied was because the game always appeared as a moving picture. The fact that the moving picture might have variations was not a problem in terms of fitting it within the definition of film, but it could have been a problem in terms of the general requirement that copyright works must be fixed. Burchett J did not address the fixation point; however, it has been held in *Stern Electronics v Kaufmann* 669 F 2d 852 (2nd Cir. 1982) that limited variations within a video game are not fatal to the fixation requirement.

While precedent now exists for protecting multimedia as film, it is submitted that the majority of multimedia will not be able to satisfy the requirement of 'capable of being shown as a moving picture'.

Transmissions to the public

This is not a category which currently exists under the Act, but it is an amendment contained within the *Copyright Amendment Bill 1996* (Cth).[12] The Bill proposes to combine the right to broadcast with the right of transmission to subscribers of a diffusion service to make a broad, technology neutral right subsisting in all copyright categories other than published editions. Physical distribution of copyright material in tangible form is, however, excluded. Certain transmissions to the public would constitute subject matter in which copyright could subsist. This would result in cable operators being granted protection for the first time.

If this Bill is implemented, providers of multimedia will not receive protection under the category of 'transmissions to the public' because makers of such transmissions must be eligible for a licence under the *Broadcasting Services Act 1992* (Cth). Those who deliver:

- a service (including a teletext service) that provides no more than data, or no more than text (with or without associated still images); or
- a service that makes programs available on demand on a point-to-point basis, including a dial up service

are not eligible for broadcasting licences. Those who provide cable on-demand services or Internet services would seem to fall within the above description and would be ineligible for broadcasting licences and thus any proposed copyright protection as a 'transmission to the public'.[13]

A new category?

Having examined how certain categories of copyright could protect multimedia it is worth asking whether a new multimedia category should be introduced. In order to justify a new category there would have to be:

- an aspect of multimedia which was unprotected or poorly protected, and
- an ensuing conceptual and practical clarity.

The definition of multimedia relied on in this paper is a computer program which combines various media forms into the one digital form and which allows the user to interact with this digital information. Put simply, there are three facets to multimedia: the computer program, the digital content and interactivity.

It is settled that the computer program aspect is eligible for copyright protection. As for multimedia content, the individual elements which comprise it are eligible for copyright protection and the *selection* or *arrangement* of the content may be protected. However, the totality of multimedia content is lacking in protection unless a *sui generis* right such as the one proposed in the EC Database Directive is implemented.

This leaves the significant quality of interactivity without copyright protection. It was suggested that a certain degree of interactivity, as reflected in the structure, sequence and organisation of a computer program, could be protected as part of the computer program if the *Altai* approach is followed. Whether further protection of interactivity should occur is questionable since the idea of multimedia might tend

to be protected, and this is not supposed to be the function of copyright.

If the suggested reforms to computer programs and to databases are made multimedia would have sufficient protection, albeit in an aggregate way and not as a single category. Any potential to gain protection singularly through the category of cinematograph film is thwarted by the requirement that films be a moving picture. Additionally, the transmission to the public category proposed by the Bill excludes multimedia. While the aggregate method of protection lacks the simplicity of characterisation and application which a single category offers, it is nonetheless effective. Moreover, the expanse covered by multimedia actually hinders it from being amenable to a single category approach. Multimedia covers such things as on demand services via cable transmission, CD Rom databases and Internet websites. Its content can vary from educational to commercial purposes. Trying to extract unifying elements from such differing applications is extremely difficult and the best that can be achieved is the broad definition used in this paper. Relying on such a broad definition would lead to a huge quantity of works being eligible for copyright protection, whereas the aggregate approach permits control of this protection. Further, breaking down multimedia into its distinctive components and protecting those components allows better attention to be paid to their particular characteristics and the appropriate protection moulded to them.

Conclusion

There is no justification for introducing a multimedia category into Australian copyright law. Instead, protection of multimedia is available through the existing copyright regime provided certain reforms are made. These are that computer programs include a certain amount of non-literal expression beyond their program codes and that database protection of the kind contained in the EC Database Directive is introduced.

References

1. See generally Cotton and Oliver, *Understanding Hypermedia: From Multimedia to Virtual Reality*, Phaidon Press, 1992. It is accepted that this is not the definitive meaning since many different understandings of multimedia exist, however, it is believed by the author to be the most accurate and appropriate definition and will be adopted for the purpose of this article.
2. Section 10(1) of the *Copyright Act 1968* (Cth) (the Act), defines literary work to include a computer program. It was confirmed in *Autodesk v Dyason* (1992) 173 CLR 330 that a computer program consisted of both source and object code: see Dawson J at 347-8 who delivered the main judgment of the High Court.
3. See s.10 of the Act.
4. This is due for implementation in the European Community by 1 January 1998.
5. A compilation is classified as a literary work: see s.10(1) of the Act. Monotti, A, 'Copyright Protection of Computer Databases', (1992) 3 *Australian Intellectual Property Journal*, pp.135-63 at p.141 raised the doubt that the express wording of the Act covers electronic databases. Compare the view of the Copyright Law Review Committee (CLRC) in its *Report on Computer Software Protection*, 1995 (the Report) at 273, para 14.64, which recommended that no amendment to the definition of literary work to include a reference to a computer database or to define a compilation was necessary because this was already understood to be the case. The recent WIPO Copyright Treaty supports this view, however, Australia is not yet a signatory to this treaty.
6. *Cambridge University Press v University Tutorial Press* (1928) 45 RPC 335.
7. See Tapper, C., *Computer Law*, 4th edn, Longman, London, 1989 at p. 53. See also Recitals 38-42 of the EC Database Directive.
8. It was not something evaluated by the CLRC since the final Directive was not available to them at the time of making their Report.
9. See Cotton and Oliver (1992), ch. 5.
10. Wei, G., 'Multimedia and Intellectual and Industrial Property Rights in Singapore', (1995) 3 *International Journal of Law & Information Technology*, pp. 214-72 at 248 states 'To constitute a "moving picture", there is of course an element of flow and coordination and it may be that not all multimedia products, particularly those which are essentially databases of facts such as electronic encyclopedias will easily satisfy the need for capability of being shown as a moving picture'.
11. See Cotton and Oliver (1992), esp at pp. 76-7.
12. The Bill is discussed in Gilchrist, S., 'Copyright Amendment Bill 1996', [1996] 6 *Entertainment Law Review* pp.E107-8.
13. This is arguably not the case in the United Kingdom: see *Shetland Times Ltd v Dr Jonathon Wills*, Scottish Court of Session, October 24, 1996, unreported.

MORE MENTIONS

CALL FOR PUBLIC SUBMISSIONS

Same sex relationships and the law

As part of its statutory duty to eliminate discrimination, as part of a review of Victorian laws to identify potentially discriminatory legislation, and under its power to conduct research, the Victorian Equal Opportunity Commission is now seeking public submissions on:

- the current status of discrimination against people who are in same-sex relationship
- how this discrimination should be redressed by law
- options for changing the law
- other relevant issues.

A discussion paper is available from the Commission (see address below) or may be downloaded from the Commission's web site: www.eoc.vic.gov.au

Written or emailed submissions should be sent to the Chief Executive, EOC, Level 3, 380 Lonsdale St, Melbourne 3000. Closing date: 31 July 1997.

Consultations will take place in Melbourne on 3-4 July, Bendigo on 10 July, Morwell on 17 July and Warrnambool on 24 July. For more details contact the EOC: tel 03 9281 7150, 1800 134 142 (toll free) email: eoc@vicnet.net.au