



# **Copyright & Virtual Worlds: Categorisation & Comparative Legal Analysis**

David Lindsay  
Monash Law

# Objectives



- Classification of virtual worlds.
- Copyright protection of virtual worlds - comparative analysis:
  - Australian law.
  - US Law (Ownership?)
- Practical example:
  - Protection of architects' plans and buildings under Australian law.

# Classification of VWs

- Degree of interactivity & user-generated content.
- Traditional computer games.
- MMORPGs – *Everquest; World of Warcraft*.
  - Greater flexibility for users but 'quests' established by service provider.
- Cyber communities (MMORLGs or social virtual worlds) – *Second Life, There.com, Kaneva*.
  - Content contributed by users (w/in v. flexible parameters).
- Fully immersive 3D environments.

# 'Cinematograph film' – s 10(1)

- 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.

# 'Embodied' – s 24

- ... sounds or visual images shall be taken to have been embodied in an article or thing if the article or thing has been so treated in relation to those sounds or visual images that those sounds or visual images are capable, with or w/out the aid of some other device, of being reproduced from the article or thing.

# *Galaxy v Sega (1997)*

- Is a computer game a cinematograph film?
- The definition of “cinematograph film” should not be interpreted narrowly, but is intended to cover new technologies, the emphasis being on the end product – motion pictures – rather than the means adopted to create those pictures.

# Wilcox J – ‘embodied’

- Embodied – “the giving of a material or discernible form to an abstract principle or concept”.
- Must the abstraction pre-exist the material manifestation? The visual images depicted in these video games did exist before the game was played. They existed in the minds of their creators and the drawings and models they made.
- The images were embodied in the computer program built into the video game machine so as to be capable, by the use of the program, of being shown as a moving picture.
- The visual images that constitute the moving picture are taken to have been “embodied” in the computer program because the computer program was so treated in relation to those images as to be capable of reproducing them.

# Lindgren J – ‘embodied’

- I do not construe ... [s 24] ... or any other provision of the Copyright Act to require that the “aggregate of visual images” exist as an aggregate of visual images prior to embodiment.
- Rather, the aggregate of visual images referred to is the end product which, in the present case, comprises the moving pictures seen as the games are played from time to time.

# Social virtual world (SL)

- aggregate of the visual images
  - Yes.
- embodied in an article or thing
  - if the article or thing has been so treated in relation to those sounds or visual images that those sounds or visual images are capable, with or w/out the aid of some other device, of being reproduced from the article or thing.

# Second Life

## ■ Rollbacks

- Estate Owners & Managers can request rollback.
- All regions, including islands, automatically backed up at regular intervals throughout the day.
- Saves terrain, land parcels, builds, textures & settings.
- Avatars themselves are not saved – but avatars create most movement.
- Moving images occur on SL servers – but moving images presumably not saved.

# SL

- Is aggregate of visual images 'embodied' on SL servers?
- ... so treated in relation to those sounds or visual images that sounds or visual images capable, with or w/out the aid of some other device, of being reproduced...
- SL viewer had built-in movie recorder – but buggy.
- SL now favours 3<sup>rd</sup> party movie recording programs – Jing Project, Taksi, Fraps, Camtasia: see [http://wiki.secondlife.com/wiki/Movie\\_Recording](http://wiki.secondlife.com/wiki/Movie_Recording)
- If movie recording software means visual images capable of being reproduced – then visual images embodied in article or thing (ie SL server), even if not stored there permanently.

# SL

- 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.
- Use of SL server results in images being shown on SL users' screens as moving pictures.
- Movie recording software can save images to another article or thing (eg DVD) from which images can be shown as moving picture.
- Therefore SL can be a "cinematograph film" – even though moving images embodied only temporarily on SL servers.

# Potential problem

- *Tate v Thomas* [1921] 1 Ch 503, 511 per Eve J
- “In *Tate v Fullbrook* it was pointed out that the Act creates a statutory monopoly, & that there must be certainty in the monopoly so created in order that injustice may be avoided”.
- Therefore, no copyright in “scenic effects”.
- Is there sufficient certainty in subject matter such as a “social virtual world”?
- Is the entirety of activities in a social virtual world proper subject matter for copyright?

## Nimmer § 2.09[F]

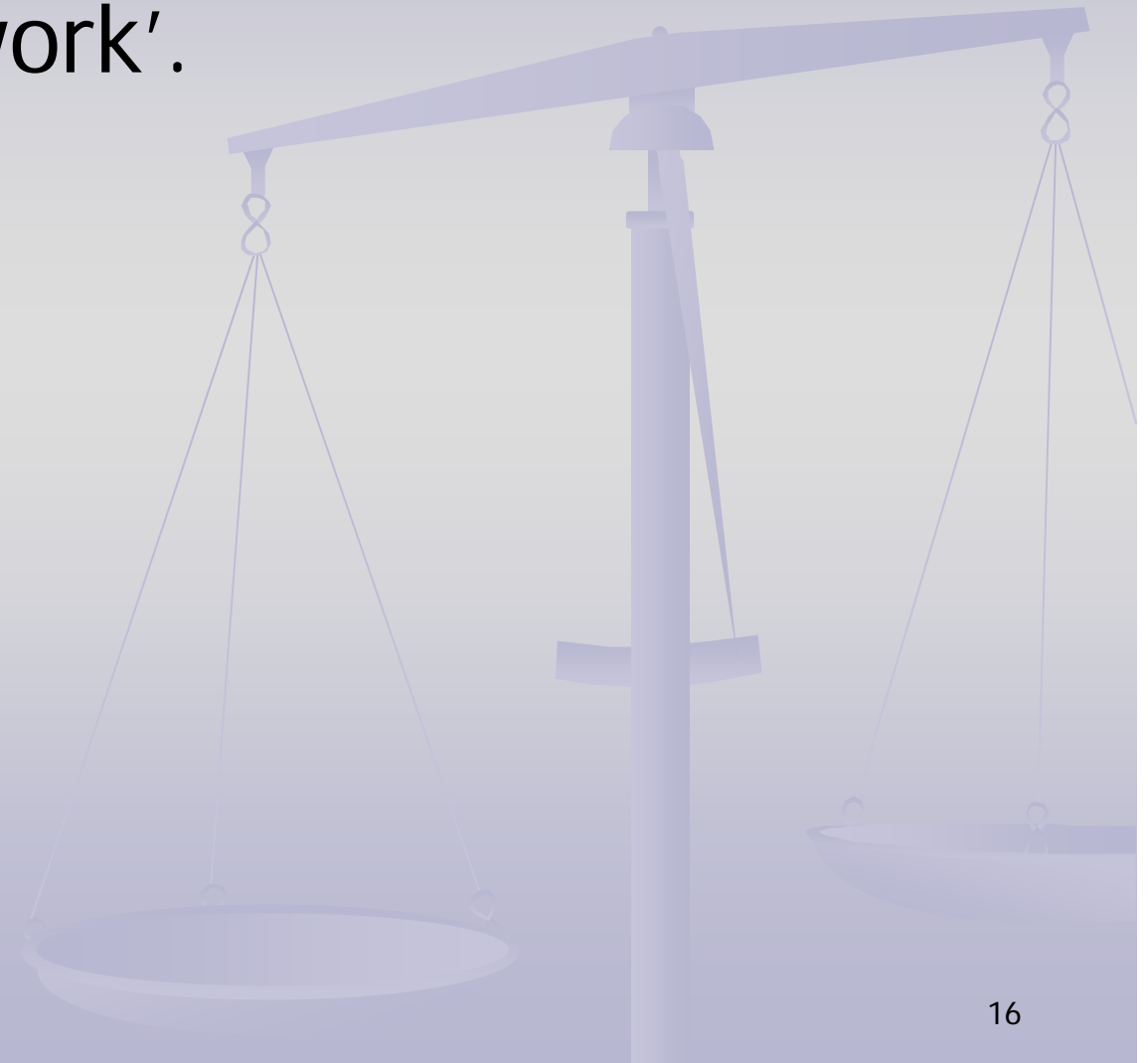
- “Motion pictures are distinctive among the various categories of copyrightable works in that their continuous sight & sound can provide the requisite fixation to almost any human activity”.

# Ownership – s 98 – “maker”

- “Maker” – s 22(4)(b) – “the person by whom the arrangements necessary for the making of the film were undertaken”.
- When is film made? S 22(4)(a) – “a reference to the making of a cinematograph film shall be read as a reference to the doing of all things necessary for the production of the first copy of the film”.
- “copy” – s 10(1) – means any article or thing in which the visual images or sounds comprising the film are embodied.
- If images “embodied” in SL server, then Linden Lab must be maker & owner of copyright in cinematograph film.

# US Copyright Law

- 'Audiovisual work'.
- Fixation.
- Originality.
- Ownership.



# ‘Audiovisual work’

- 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.
- ‘Motion pictures’ – “audiovisual works consisting of a series of related images which, when shown in succession, impart an impression of motion...”

# 'Audiovisual work'

- Images;
- 'Related' & presented in a 'series';
  - *Midway Manufacturing* (1982) – not necessary that images presented in sequence.
  - refers to 'any set of images displayed as some kind of unit'.
- Capable of being shown by a machine or device.
  - Audiovisual work may be embodied in computer program.

*Worlds of Wonder* cases – talking/gesticulating teddy bear – held to be audiovisual work: "Teddy Ruxpin is properly classified as an audiovisual work".

# ‘Audiovisual work’

- *WGN Continental B'casting* (1982)
- “Congress probably wanted the courts to interpret the definitional provisions of the new act flexibly, so that it would cover new technologies as they appeared, rather than to interpret those provisions narrowly & so force Congress periodically to update the act”.
- Therefore, social virtual worlds (SL) audiovisual works.

# Fixation

- ... works must be 'fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device'. 17 U.S.C. § 102(a).
- A work is 'fixed' in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. 17 U.S.C. § 101.

# Fixation

- Report of House Judiciary Cttee (1976)
- ... the definition of 'fixation' would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the 'memory' of a computer.
- *Midway v Manufacturing* (1982) – “When read in context ... the “purely evanescent or transient reproductions” referred to by Congress are those arising from live telecasts or performances that are nowhere separately recorded. Clearly, the lack of any recording of such events would preclude their ever again being identically reproduced”.

# Fixation



- A work consisting of sounds, images, or both, that are being transmitted, is 'fixed' ..., if a fixation of the work is being made simultaneously with its transmission':  
17 U.S.C. § 101.

# Temporary/ephemeral copies

- Temporary/ephemeral fixations in RAM sufficiently fixed for copyright purposes.
- *MAI Systems v Peak Computers* (1993)
  - “loading of copyrighted software into RAM creates a ‘copy’ of that software in violation of the Copyright Act”.
- Gorman & Ginsburg (2002) 88 - “Despite the 1976 House Report's suggestion that ‘transient reproductions... captured momentarily in the ‘memory’ of a computer’ should not be deemed ‘fixed,’ subsequent legislation appears to adopt the principle that entry of a work into the random access memory of a computer makes a ‘copy’ (and thus a ‘fixation’) of the work”.

# Temporary/ephemeral copies

- *CoStar Group, Inc v Loopnet, Inc* (2004) (4<sup>th</sup> Circuit).
- “When an electronic infrastructure is designed and managed as a conduit of information and data that connects users over the Internet, the owner and manager of the conduit hardly ‘copies’ the information and data in the sense that it fixes a copy in its system of more than transitory duration.”

# Fixation

- 'reproduced ... with the aid of a machine or device'.
- *Midway Manufacturing v Artic Int'l*, 547 F. Supp. 999 (1982) – 'audiovisual features of games may be reproduced over and over again, for extended periods of time'.
- *Stern Electronics, Inc v Kaufman*, 669 F. 2d 852 (1982) – 'The repetitive sequence of a substantial portion of the sights and sounds of the game qualifies for copyright protection as an audiovisual work'.
- How does *Stern's* "repetitive sequence" test apply to social virtual worlds?

# Second Life

- All regions automatically backed up at regular intervals throughout the day- saves terrain, land parcels, builds, textures and settings.
- Avatars are not saved – but exist ephemerally.
- Therefore – terrain, land parcels, builds, textures – clearly fixed (& audiovisual work).
- Avatars (which provide movement) – apply *MAI Systems* - although only temporarily stored on SL servers – probably also fixed (& audiovisual work).

# Originality

- Copyright subsists in original works of authorship – 17 U.S.C. § 102(a).
- Work owes its origin to the author – not copied from other works – “originates” from author.
- Minimum “spark of creativity”.
- *Feist Publications* (1991): “Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity.”

# Originality



- *Stern Electronics* (1982):
  - Computer game original despite user's interaction.
  - Originality - "... the repeated appearance of the same sequence of numerous sights & sounds in each play of the game..."
- *Baltimore Orioles* (1986):
  - Players' performances possess the modest creativity required for copyrightability – because "great commercial value".
  - Therefore baseball games are copyrightable works.

# Ownership



- Authorship is *sine qua non* of any claim to copyright.
- Joint work
  - “a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole”: 17 U.S.C. § 101.

# Joint work

- *Thomson v Larson* (1998): co-authors must have:
  - (1) made independently copyrightable contributions to the work; &
  - (2) fully intended to be co-authors.
- Are the contributions of Linden Lab e/ees sufficient for it to be co-owner (as employer)?
- See Jane C. Ginsburg, "Putting Cars on the "Information Superhighway": Authors, Exploiters, & Copyright in Cyberspace" (1995) 95 *Colum. L. Rev.* 1466.

# Derivative work

- Derivative work – “a work based upon one or more pre-existing works” – 17 U.S.C. § 101.
- *Micro Star v Formgen* (1998) – user-created levels for Duke Nukem 3D were infringing derivative works.
- “A copyright holder holds the rights to create sequels”.
- Formgen’s licence – Any new levels the players create ‘must be offered [to others] solely for free’.
- No discussion of whether joint work.

# Derivative work

- Nimmer - § 6.05 – Derivative work vs joint work?
- The distinction lies in the intent of each contributing author at the time his contribution is written.
- If work written with intention contribution be merged into inseparable parts of unitary whole – joint work.

# SL - ToS

- 1.3 – Content available in the Service may be provided by users of the Service, rather than by Linden Lab. Linden Lab and other parties have rights in their respective content...

You acknowledge that Linden Lab and other Content Providers have rights in their respective Content under copyright & other applicable laws & treaty provisions,...

# SL - ToS

- 3.1 – Subject to the terms of this Agreement, LL grants to you a non-exclusive, limited, fully revocable license to use the Linden Software & the rest of the Service during the time you are in full compliance with the ToS ... Nothing in this Agreement, or on LL's websites, shall be construed as granting you any other rights or privileges of any kind with respect to the Service or to any Content.

# SL - ToS

- 3.2 – You retain copyright & other IPRs with respect to Content you create in SL, to the extent that you have such rights under applicable law.
- Users of the Service can create Content on LL's servers in various forms. LL acknowledges & agrees that, subject to ToS, you will retain any & all applicable copyright & other IPRs with respect to any Content you create using the Service, to the extent you have such rights under applicable law.

# Best guess

- Copyright subsists in SL under US law as “audiovisual work” (sufficiently fixed & original).
- The ToS are ambiguous regarding ‘intention’ of contributors.
- SL may be a “joint work”.
- Contributions of LL may not be sufficient for co-ownership.
- Users will be joint authors & co-owners – creating much complexity.

# Australian law - Buildings?

- Copyright subsists in architects' plans (drawings) & buildings as 'artistic works'.
- Copies made of buildings in virtual worlds may infringe copyright:
  - Indirect reproduction in material form of copyright in architects' plans.
  - Transdimensional reproduction in material form (s 21(3)) of copyright in building.

# Defences? S 66

- The copyright in a building or a model of a building is not infringed by the making of a painting, drawing, engraving or photograph of the building or model or by the inclusion of the building or model in a cinematograph film or in a television broadcast.
- Reproduction of building in SL may be a 'drawing' (is a 'drawing' 3D?)
- SL may be a cinematograph film.
- S 66 does NOT apply to architects' plans – only to buildings.

# Defences? S 67

- ... the copyright in an artistic work is not infringed by the inclusion of the work in a cinematograph film or in a television broadcast if its inclusion in the film or broadcast is only incidental to the principal matters represented in the film or broadcast.
- If SL a film, then building (& drawing of a building) included in film.
- But is its inclusion “incidental”?

# Conclusion

- Social VWs raise many novel legal issues.
- Application of existing laws still depends upon analysis of underlying technologies.
- There are more questions than answers!
- Further research required on application of copyright laws to social VWs (from positive & normative perspectives).