# Games History, Content, Practice and Law

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## A Brief History of Games and Gaming WITH KEITH DONE

Competition has always been a key trait of the Human race. Essentially linked to the sex drive and the need to compete for a mate, competition has evolved, as we have evolved, changing from being able to beat the living daylights out of the rival Neanderthal, to being able to beat your friend with the roll of a dice or the rapid tap on a keyboard.

Once, our ancestors spent every living moment hunting and gathering food and avoiding getting eaten in the process but, as we evolved and got good at doing what Humans do – namely, organising others to do our work for us – we had sufficient time to devote to procreation and other pursuits. From the day that the first caveman played 'flint, deerskin, rock' we have enjoyed games as a diversion for the mind and entertainment to fill in our more empty days.

Ancient paintings and relics show that competitive sports such as archery, rowing and hunting evolved as early as the late Neolithic Age in 5000 BC. These were to continue to develop into many more-organized activities; events typical of the ancient Olympics, that were both individual and team-based in nature. However, this document is devoted to the evolution of tabletop gaming and I will focus on that specific area of games.

Just as games relying on physical prowess evolved as civilisation took hold, so did games requiring a combination of luck and grey matter. Archaeological diggings in Africa and the Middle East have uncovered what is considered the oldest board games, made between 7000-5000BC. Known as Mancala, the games have been found to be essentially similar in design, the concept being to move stones into specific depressions or spaces on a stone slab, according to a set of defined rules. Games that later evolved from this basic concept include the Royal game of Ur and the Egyptian game of Senet. These were all mathematical games and it is suggested that they may have been invented by early accountants or merchants, who originally used similar boards to tally numbers, count stock etc. However, tomb paintings clearly show these boards and pieces as being used for recreational purposes.

The next real 'leap' in the evolution of gaming comes between 400 – 800 AD with the appearance of abstract wargames appearing in Asia and the Middle East. These included such games as Checkers, Go and Chess. Although all of these games had earlier histories, it is the current versions that are still played today that evolved during this period. This introduced new strategies and dimensions to gaming, especially Chess, which invested the pieces with distinct moves, rather than the board dictating the strategies.

As the world moved into the medieval age, more variants on these strategic games evolved throughout Europe, each being a spin on moving pieces on a grid or checkerboard in order to seize the opponent's pieces. These games included favourites such as Fox and Geese, Alquerque and Fierges.

The establishment of Guilds from the 1300s to 1500s AD changed the economic focus of Europe from the land to the towns; requiring the provision of manufactured goods for sale. Improved technologies in the area of printing and paper manufacture resulted in the next great innovation in tabletop games – the playing card, particularly the standard 52-card deck which we use to play a diverse range of games. The 52-card deck originated in the Middle-East and was probably introduced to Europe as a result of the Crusades. Its success was primarily due to its potential as a new form of gambling instead of dice, which had been around since ancient times. The popularity of card games continued on throughout the next few centuries as the main tabletop distraction, filling in the idle hours for commoner and noble alike.

With the 1800s came the true era of industrialisation and mass-production. Up until then, most board games were made by the hands of the person who intended to play them or by craftspeople, who sold them to the wealthy; the means of production providing for a small output and the games being highly priced. Only cards and dice were games that were available to the mainstream market. Chess and other such board games were more expensive to make and stayed in the realm of the gentry.

However, as the middle-class grew during the 1700s to 1800s, many people, with increased time on their hands, invented a new and diverse range of games mainly as a form of family amusement and acceptable social interaction outside of families. These were activities that had few (or no) pieces or board; games like Charades, Blindman's Bluff and Pass the Slipper. These are typical examples of games of the era that became known as 'parlour games', usually played in the living room, or parlour.

Recognising the popularity of these social forms of entertainment, entrepreneurs saw ways to cash in by making inexpensive saleable products. Soon, people in Victorian Britain and the USA were hand-making the first generation of – what would become the first real mass-produced board games of the modern era. These were mainly chase or race games, using dice to move along a track and set dice rolls to overcome obstacles on the board.

The first truly mass-produced example was the 'Mansion of Happiness' published in 1843 by the W and SB Ives Company. It was a moralistic game that rewarded children for doing good tasks. The success of this inspired many other companies to reflect aspects of day-to-day life in their games, culminating in the release of 'The Checkered Game of Life' in 1860 by Milton Bradley. The game is still a popular product, made by Hasbro today, and simply known as 'The Game of Life'.
Travel Games, such as 'Around the World' became popular during the early 1900s as commuting about the globe became easier. However, the biggest hit of all-time was yet to come.

Lizzie Magee designed a game in 1904 that was used as a political tool to illustrate unfair capitalist activities amongst US landlords. It was published as the 'Landlord's Game' in 1910 and although it was never a best seller, it remained popular within the Quaker community throughout the 1920s. Charles Darrow, an out-of work salesman was familiar with the game, having played it when staying in a few boarding houses run by Quakers. He added a few things, changed the focus of the game to bankrupting your neighbour as being its winning objective and presented it as his own design to Parker Brothers. In 1935 the world's best-selling game 'Monopoly' was born.

The next big hit was 'Scrabble', designed by an architect and lover of crosswords, Alfred Butts. The game was an 'underground' cult classic during the 1940's with games being hand made and distributed to crossword fans across the USA. In 1950, the president of the Macy chain of stores came across a copy while on vacation and ordered stock for his retail outlets – Scrabble soon became a board game icon across the world.

The 1950s brought the mass media into our lives via the medium of television and all kinds of products associated with marketing TV shows and motion pictures began to appear. Along with owning a cup or lunch-box displaying your allegiance to your favourite TV show, you could also buy games inspired by the very same shows. Titles such as 'Video Village'

and 'Concentration' were popular for Milton Bradley in the 60's and all manner of children's cartoons had their own associated game. The trend continues today, with TV and major motion pictures influencing the market. Go into any large retailer and you can buy titles such as 'CSI', 'Big Brother' and 'Star Wars'.

The majority of the games I have described so far are abstract board games. These usually have pieces and a playing board and often incorporate dice and cards as an additional or core components. However, there was another form of tabletop game that had been evolving in concert with traditional board games, also tracing its roots back to ancient times. The difference was that this genre of game was confined to the military for many centuries and only became popularised and available to 'amateurs' in the early 1900s.

For countless ages, military commanders employed miniature figures and scaled down terrain to illustrate tactics and battle plans to their subordinates. The use of these miniatures gradually began to take on the form of 'simulation games' and, during the early part of 19th century, the use of miniatures by the military became more sophisticated, with officers taking command of Lilliputian armies and fighting simulated battles, all according to sets of detailed rules; rules governing such things as the movement rate of troops, distances and range of weapons – all scaled down for the size of the figures. 'Kriegspiel', a game employed by the Prussian army, was considered the most accurate in recreating warfare on a tabletop. Soon the armies of other nations were adapting Kriegspiel to their officer training regimes and war-gaming (or simulation gaming) was born.

Still, this type of gaming, much more complex and detailed than your average strategy game, remained out of reach of the mainstream. It was the famous British author HG Wells who introduced war-gaming to the general public. Fascinated by this military pastime, he wrote and published his own set of miniatures rules, called 'Little-Wars'. However, the game did not become an instant hit. Most publishers of mass-produced games were geared up for paper-based production, with games being largely composed of cardboard, paper and wooden tokens. War-gaming required metal-cast miniatures and detailed terrain and lacked commercial support to become an overnight success story. However, the hobby continued on with a strong cult, kept alive still by the military and talented individuals capable of casting their own metal figures. It would be a number of synchronistic factors that would combine to bring war-games more into the mainstream

and, at the same time, create the next leap forward– Role–Playing Games (RPGs).

The first of the contributing factors to the advent of RPGs was the release of 'Lord of the Rings' (LOTR) by British author J.R.R. Tolkien. Arguably, this tale of Hobbits and heroic quests set against a quasi-medieval world caused a renewed interest in fantasy fiction across the UK, and in particular middle-class America of the 1960's. The second factor was the chance union of two particular Tolkien enthusiasts, based in Wisconsin, USA. Gary Gygax and David Arneson were also avid medieval war-gamers and it wasn't long before they began to use war-gaming rules to recreate battles from LOTR, instead of simulations from historical sources, such as the Battle of Agincourt or Hastings.

With a number of other friends within their gaming circle, Gygax and Arneson wrote 'Chainmail' in 1969, providing rules for small unit combat in a medieval setting – battles between forces numbering a dozen or so figures aside. Soon they were down to individual soldiers fighting one-on-one combat, and the concept of unique game characteristics was introduced. In the past, a figure on the table may have represented 20 men, to which the rules assigned an intrinsic strength. There may be multiple copies of the same figure on the table but they would all normally be rated with the same generic strength. Once Gygax and Arneson got the game down to one figure actually represented by only one person, they began to rate each figure differently according to physical characteristics, such as strength, dexterity, constitution etc. This quickly led to the idea of running a game for a heroic group of characters fighting against foes; the foes being 'controlled' by a separate referee. The game was free flowing, with the referee, controlling the game through a narrative and using the rules to govern combat and tests reliant on individual character abilities. In 1979 'Dungeons and Dragons' was published as the first commercial role-playing game (and still the market leader) under the banner of Tactical Studies Rules (TSR).

The real difference with an RPG was that, in reality it needed no board or pieces, the whole game could be played out in the imagination, under the guidance of a referee or 'storyteller'. The referee described everything that the players experienced in an alternate setting, making decisions based upon probabilities and dice rolls. The game became co-operative, with players assisting each other, acting as a team to overcome adversaries and problems introduced by the referee. Throughout the 1980's, many RPG rule systems were created by rivals of TSR, drawing their inspiration, from

multitude of source materials. While largely jumping on the fantasy bandwagon, they also explored alternate settings for their rule-sets, including science fiction, the wild-west, horror and espionage. In a similar vein to board games, many RPGs drew upon TV shows and motion pictures for their settings (Star Trek, Star Wars and more recently Babylon 5 and Buffy the Vampire Slayer). The RPG was a revolutionary idea in the development of entertainment, with far-reaching consequences that would heavily influence other groundbreaking technologies of the same time period.

Paralleling the emergence of RPG's, was the development of the PC and games in the virtual world. RPG's had a great influence in material that was produced for the PC (and they still do). Early games, such as Ultima and Wizardy, were highly text based with primitive graphics and were immediately embraced by the 'paper and pen' based RPG community. As the memory capacity and graphics quality of PCs grew during the 80s and 90s so did the PC audience, drawing a significant number of enthusiasts away from traditional forms of round-table gaming. There was a definite slump in traditional RPGs during the 1990s, which was related both to the rise in interest in PC Games and poor business practices amongst traditional RPG producers, particularly TSR.

Despite the dent made into the gaming community by PC games, innovators of non-electronic media were still out there. Another huge breakthrough in game design occurred in the early 1990s. Richard Garfield was the designer of a few moderately successful board games, including Robo-Rally. One day he was watching his children enthusiastically swapping baseball trading cards and came up with the idea of the collectible card game; the player would collect packets of cards and each packet would contain a different mix of common, uncommon and rare cards. The concept was that the player would use their skill in making up decks of cards (according to limitations set by the rules) that they thought could defeat an opponent's deck of cards in a game. 'Magic: the Gathering' arrived on the scene, published by Wizards of the Coast (WOTC) as the first collectible card game (CCG) and has spawned many copycats since then.

Such was the runaway success of Garfield's game and the millions in profit that was generated, that toward the end of the 1990s WOTC were able to buy up TSR, who was on the verge of bankruptcy. Vice-President of WOTC at that time was Ryan Dancey, a Dungeons and Dragons enthusiast. Prior to any take-over, he was sent to investigate reasons why the company

that produced his favourite game was in so much trouble. Essentially, he found a company that was out of touch with its fan-base, producing poor quality products that nobody wanted and nobody needed in order to run a game of Dungeons of Dragons. In addition, hundreds of thousands of dollars were being used to protect the copyright on an endless cycle of products, which it really had no real need to protect in economic terms.

Basically, a resourceful referee of any RPG only needs the core rule-books that define the game setting. The actual game is like a series of stories (called adventure modules) and a creative referee can design their own adventures, using the core books. TSR invested a lot of energy into producing its own adventure modules and many of those were contrived or sub-standard. What's more, they clamped down on anyone trying to write independent adventure modules, alienating the more talented members of their fan-base. As the internet evolved in the 1990s, those former fans became e-community leaders and their criticism of the TSR product made a severe impact on sales. Add up falling sales and the high cost of retaining rights on a dead product and you've got a disaster waiting to happen.

Ryan Dancey managed to reverse all that and restore the Dungeons and Dragons product back to its place as market leader in a very short time. He took the 'bold' step of listening to the fan-base and organising a complete overhaul on the core Dungeons and Dragons source books. But even more dramatically, inspired with the emerging Open Copyright Licence (OCL) movement he created the Open Gaming Licence for WOTC in 2002, allowing amateur and independent companies to publish RPG adventures and related products, using a standard reference document of Dungeons and Dragons game mechanics.

This has created a renaissance in the RPG community, with many unpublished writers and artists finding work with small companies, establishing their particular niche in the market, often exploiting new technologies (e.g. offering product for download from the web rather than in a printed format). The existing licence has also drawn some criticism from those who think it is too restrictive in its current format, citing problems in distinguishing open content from closed content in publications and product identity requirements as the main issues. It is interesting to note that these critics have suggested a shift to using the OCL Attribute-Share-a-Like Licence.

There you have it, a brief synopsis of games from their creation in the ancient world to their design and publishing under a movement inspired by

the OCL. As we move into the 21ˢᵗ Century, boldly going where no one has gone before, the games industry seems to have gotten a bit healthier and a bit wiser. There is a new boom in traditional board games being driven by the translation of many European favourites into the English language, Collectible Card Games seem to have taken a second wind with a second generation of gamers getting interested in 'Magic: the Gathering'. PC games are bigger than ever with a large following in diverse Massive Multi-player Online Role Playing Games (MMORPGs) and the traditional RPG industry is a hive of industry. The last two areas offer the best opportunity for creative input under the OCL movement and it will be interesting to see what challenges and directions the industries involved take to further embrace and engage their fan-bases in the near future.


**Computer Games Landscape WITH SAL HUMPHREYS**

Over the past six months Professor Brian Fitzgerald, John Banks, myself and Nic Suzor decided to look at what it was Auran was doing with their licensing and approach to managing IP in fan-created content. We were all interested in this and our paper on copyright is featured in *Media International Australia*.[215]

My task for today is to cater for people in the audience that might know nothing about games. Games are incredibly successful interactive applications. We hear about the term interactivity all the time – to the point that it has almost been evacuated of meaning, but games really are interactive in interesting and meaningful ways. Games are very successful at what they do, and it is worth looking at them whether you are interested in games or whether you are more interested in new media and digital environments. We can use them as an exemplar for how a really good interactive environment actually works, and for examining what the implications of that might be in terms of IP, copyright, and various other regulation issues. We need to look at how they differ structurally from other media. They are not the same as a story, or a book, or a piece of music. They do very different things and part of that difference is about the mode of interactivity that they actually employ in engaging their users.

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[215] Sal Humphreys, Brian Fitzgerald, John Banks and Nic Suzor, 'Fan based production for computer games: User led innovation, the 'drift of value' and the negotiation of intellectual property rights' (2005) 114 *Media International Australia* 234.

Looking at their differences gives us the chance to look at what happens in the legal ecology that surrounds them. One of the things that has not really been dealt with, or rather, we keep touching on it and then we segue away from it, is about commercialisation. The thing about games is they already exist in a commercialised environment and so the issues about commercial and non-commercial that arise in other new media environments are already being encountered and dealt with in varying ways by the games industry and players.

The model implemented through Trainz gives us an opportunity to explore how the relationship between commercial and non-commercial does not have to be an either/or proposition in the way that it has been set up in a number of talks that have been given in the last day and a half. It's possible to actually work out hybrid solutions and this is one of the things that a Creative Commons License tries to do. When I think about Creative Commons Licensing I sometimes translate that to creative compromise – that it is a compromise around the rights between totally open and closed models.

I want to begin by outlining some basics about computer games before moving on to examining ownership and licensing. The size of the computer games industry is very big with sales at more than 239 Million in the US. There are no worldwide figures currently available. There are figures from the UK though, which estimate the revenue from entertainment and games to be £18.5 billion. In terms of demographics, there are a few myths around – for instance that game players are always geeky adolescent boys locked in their bedrooms in some little isolated bubble – and it is good to debunk these myths. Half of all Americans aged six and older play games, with the average age being 29 years old. We see here that the generation that grew up with games did not leave games behind as they got older, and are still playing. Also, 39 percent of game players are women, so it is not just a male activity.

We talk about videos games or computer games, as if they are all the same thing. They actually come on quite different platforms. There are consoles like Xbox and other proprietary hardware platforms, there are computer or PC games and then there are arcade, mobile phone and the mixed environment games. The console games give rise to a whole extra set of interesting issues around proprietary integrations of hardware and software. However we are not dealing with that in this presentation.

There are also quite significant differences between a single and multi player game particularly in terms of content creation. The multi player networked games mostly run in the PC environment, although the console games have begun to be networked. X Box now has a network facility for playing with other people across a proprietary network.

The types of games most people think of when they hear about computer games are first person shooters. In fact there are a lot of genres and first person shooters are small part of the market. Henry Jenkins says that Barbie Fashion Designer actually outsold Quake which is a fairly salutary kind of statistic. I imagine that Quake had a lot of 'cracked' copies circulating on the net, which probably meant that there were still a lot more copies of Quake than Barbie in existence. The point is there are a lot of genres of computer games which don't involve shooting

I want to talk a little bit about interactivity in the production cycle. Apart from their success and the size of the industry, games are implemented through a different structure and a different production cycle than most conventional media and these differences have implications for many of the institutions that surround them. When I use the term interactivity, I use it to mean that games require a meaningful input from players in order to progress. Some games, but not all, *require* players to make up their own content as they go (I'm not talking here about the third party content creation that is often generated by fans of a game, but that just the process of playing creates content). The person who is playing it has to be engaged in progressing the text, which is not the case with most other media that are not interactive. Rather than engaging with an already finished narrative, players are actors within the text itself, and the game assesses the performance of the player and gives feedback in various forms, about the performance.

In some games, which are more emergent there is a set of rules, a set of goals, but there is the scope for a fair bit of creativity and innovation on the part of the player within those parameters. When you structure emergence into a multi player environment you find that players actually create content for each other. Thus we are not talking about a product that is authored entirely by the developer. The product itself has undergone a shift in authorship and the consumers have become productive. This is a fairly major structural shift. We are not simply talking about a piece of music that has been authored and released and then someone has picked it up and remixed it. We are talking about the product itself being made by the people that are using it. It is a shared or a collaborative authorship.

While production of something as complex as a film, which can involve many hundreds of people, can still fit within a copyright framework, multi player games actually disrupt the cycle by incorporating the productivity of hundreds or even thousands of consumers into the construction of the text itself. Consumers usually reside at the end of the value chain, not somewhere at the start and in the middle. Texts such as books or a piece of music are usually created by an author, their distribution and access rights are organised by publishers, and they are consumed by audiences. There is a temporality to the process and it is quite linear. However, if the audiences start to author parts of the text, how are the distribution and access rights negotiated, and who actually owns that text? That is what the structural shift in games does: it disrupts a lot of the conventions because copyright relies on a notion of authorship that does not really fit with this production model.

If you disrupt authorship you disrupt the basis of copyright and intellectual property and this implies a whole shifting in relationships between developers, publishers and players that has many implications. We are not talking about all games – a single player console game which has a linear progression that gives you no options for creating your own pathways or content at all probably does not fit this model. But something like a multi-user network game really fits into the shifting terrain. They have a constant production cycle which is recursive. They are never finished and are collaboratively authored. More conventional media follow a linear cycle (although this is not to deny the process of cultural production which is very recursive at a meta level), but the production of the individual text has a linear structure.

My point thus far has been to highlight the difference between games and more conventional media. I want to move now to considering content creation communities. When we speak about modding communities we are moving away from the activity of playing and into the creation of extra content which becomes incorporated into the game. The games industry uses this content all the time, it is an integrated part of the industry model. It is a commonplace. The industry has recognised that the productivity of players can be harnessed and have understood the innovation and the research and development potential of their audiences. Their players have become creators who can actually be harnessed into the production of the text. That is a really exciting and new way of looking at how you would produce something in a media context. Game texts change through playing,

they are changed through post release additions, and they have this recursive production cycle which incorporates player creations.

What do players create? There has been a long history of players doing this whether the company releases tools for doing so or not. Back in the early 1990s when PC games were still young and not a very well developed industry, players would always hack the code and make their own stuff because they often thought they could do it better. They would make 'skins'; objects; they would mess with the code and make their own artificial-intelligent agents or 'bots' to play against; make customised user interfaces; or they would create entire games using existing games engines. The incredibly successful game CounterStrike was developed by a team of players who decided that they could use the engine from HalfLife and make their own game. It has won all sorts of industry awards and player awards and has been commercialised and the whole thing was made by player creators. This is a fairly well developed pattern within the industry. Ninety percent of the content inside the Sims is created by players, who trade their content on the internet.

Where it gets interesting is the response from, or the ways in which this is managed by, developers or publishers. Publishers can be different from developers and so they have a different set of understandings of what they want from products. Some publishers will give you the tools and you can make mods. However, they will then claim to own the mods. So anything a player creates for the game, they can upload into the game, can share it with everybody else, but the publisher will claim all the IP on it. Others say players can upload it, can share it with each other, and do not claim ownership of it, but prevent players from commercialising it. Still others say players can create mods, can do a variety of things with them, and do not prevent the commercialising of them. Players can share mods and can choose to monetise them if they want (this is the model Auran has chosen with Trainz). This range of responses to modding practices is about harnessing the productivity and then negotiating the ownership of the IP, and that can be a very complex process.

Another aspect concerning ownership and licensing is the secondary economy surrounding games – black markets where people sell in-game items for real money in internet auction houses. This poses all sorts of interesting questions for the law because if a virtual item takes on a real world value, if money inside a game can be equated to real money, does that mean when somebody steals something inside the game it is theft that can be prosecuted under the law? Which is basically a jurisdiction issue in

a funny way. Is the game actually a separate jurisdiction or is it inside the jurisdiction where the game is played? Is there a magic circle that delimits the game as fantasy, and can it be maintained in the face of player practices to the contrary?

The issues concerning property are about who owns the database of objects in the game. Major conflicts and tensions arise from this. In particular I would like to point to the issue of avatars. When you develop a character in a game, you inhabit an avatar – it is your online identity. Sometimes we are talking about people who play between twenty and forty hours a week inside a virtual world and their avatar embodies some of their identity. Can Sony Online Entertainment (for instance) own that online identity? Where is the hard line between the virtual and the real and between what is code and what is social? Is there ever any importance attached to the social if we always resort to property law? Do we erase the social significance of these things? Legal discourse often erases the importance of affect and social community when it resorts to property as its main discursive construction.

## Involvement of End Users in the Production Process WITH JOHN BANKS

Both Sal Humphreys and Greg Lane have touched on some very dynamic and quite exciting areas in the game development process, with the game developer and the production process overlapping with the creativity and involvement of the end user communities, namely the fans and the game players. I will talk about the Trainz project and how we started it back in 2000 and recent releases and how over that process we have increasingly involved the end user community, or the fan community, which is basically a worldwide network of Trainz fans. Their passion and enthusiasm for Trainz is directly involved with the Trainz development process, which adds incredible amounts of innovation, creativity and value to the project. Auran has reaped a lot of benefit from the involvement of fans in the project – Auran is therefore accountable to the fans for the benefits gained. Towards the end of this presentation I will talk a little about the accountability we have towards the fans for the innovation and creativity that they bring to the project.

Game designers and developers are increasingly enlisting and involving fan communities in the creation, development and promotion of games. Involvement of the end users does not just happen when they pick the game up and buy it at the store and take it home and install it. Even the very idea of calling them end users is now a little redundant because fans are right up

front increasingly participating in the games development project itself. They are creators and producers. Trainz is a perfect example of this – a distributed organisation that is physically located at Teneriffe in Brisbane and yet incorporates a peer production network of fan content creators who are based in the United States, the UK, Italy, Germany, throughout Scandinavia, etc. This very distributed team of content creators all come together and contribute to the Trainz project.

There is another way of thinking about this which was previously raised by Sal Humphreys. Professor John Hartley from QUT talks about how the value produced in these networks is drifting in such a way that the relationship between producers and consumers has become blurred. On one hand we have the Auran development team working on the Trainz project made up of software developers, artists, programmers, designers, producers, etc who are professional and paid for what they are doing. On the other hand the very success of Trainz relies on a pool of voluntary fan labour, so you are getting this blurring of the boundaries between the professional and the amateur.

One way of thinking about these networks is the phrase 'participatory culture' and I am borrowing this phrase from Henry Jenkins. The reason I am throwing it up is because there can be a tendency to think about these relationships as being new and novel, that they have just erupted upon the scene in the last few years. It is important I think to remember that researchers like Jenkins have been looking at the relationships between fans and corporate media producers for well over 10 years now. Jenkins' interests go back to looking at things like the Star Wars fan community and the involvement of Star Wars fans in creating amateur films that spin off around the Star Wars universe. In Henry Jenkins' *Textual Poachers Television Fans and Participatory Culture*[216] he talks about the fans troubled relationship to the mass media and consumer capitalism. He talks about fans lacking direct access to the means of commercial cultural production, and their limited ability to influence entertainment industry decisions.

Henry Jenkins' more recent work indicates a shift in these relations among fans and corporate media producers. He talks about three things that influence the emergence of these new relations that Trainz provides a strong example of. First, new tools allow end users to create and generate there own media content. Second, the Do it Yourself media production

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[216] (1992) Routledge, New York.

culture which has emerged around these tools, which we can see with the Trainz fan community as they create things such as their own locomotive models. Third, Jenkins mentions economic trends favouring media convergence.

Keith Done's account of Dungeons and Dragons, and the move particularly more recently by Wizards of the Coast with open game licenses, gives you a sense of the importance of these open relationships with the fan communities. The whole Dungeons and Dragons milieu has been quite influential. Auran's CEO, Greg Lane, comes from a strong role playing background, and was influenced by the open culture that built up around role playing.

I want to move on to discuss Auran and Trainz and the process of making one of these distributed production networks work. How does it work? How do you manage it? You have a pool of very talented and creative voluntary fans, but because you are not paying them they do not necessarily do what you (the company) want them to do, or when you want them to do it. The relationship that emerges here between the commercial and the non-commercial, and the propriety and the non propriety gets quite messy. It is a messy network, as the relationships are not clearly delineated.

Trainz and the fan third party content creation community emerged when I first went to work for Auran. Greg Lane said "well John, the project you are going to be working on is Trainz which is about this model train simulator". I was not really excited about it at the time – I was thinking I would be working on some other cool game project and I was doing Trainz stuff! We discovered there was a network of Trainz fans with websites all over the world into which we could tap. We identified the leaders of these networks and invited them to Auran's website to share their ideas through the forum we had launched. We published on the forum the very early design  ideas for the Trainz project, describing where we wanted it to go, and what we thought it would look like – its features and functionality The aim was to  obtain the fans' feedback and input. There were heated debates with the fans about our initial design proposal

We had one guy by the name of Vern who was an influential member of the TrainSim online fan network. Vern had strong opinions about the design proposal and would hammer our team with his views. He was not happy with the direction in which we were taking the product and would hammer us with his opinions, with what he thought we should and should

not be doing. Vern's feedback actually ended up being very influential on some of the key design decisions we eventually made.

Trainz was first released at the end of 2001. We have gone through a series of releases with the most recent being Trainz Railroad Simulator 2004. One of the interesting things about the graphics and art content for these releases is that it was not exclusively created by Auran artists, but rather also generated by members of the fan community and a lot of those fan created assets are now included in the retail release packages

Trainz now is a creative platform, we (Auran) create the platform and core functionality and users provide the art content. Over time we have established strong collaborative relationships with the extremely talented fan creators that have emerged. Some of these fans have formed teams and have gone semi-commercial and are now selling add-on packs for Trainz from their own websites. The fans bring innovation and value to Trainz through their creative efforts. The download repository for the fan created content on the Auran website now includes well over 26,000 individual assets, of which 2800 are locomotive models. Many of the assets for Trainz commercial release packages are now provided by the fans. There is an interesting mix here between the commercial and the non-commercial, the proprietary and the non-proprietary. It is a messy unruly network of creators generating innovation for us.

This creates complex IP issues/implications and Greg Lane has touched on that. Auran is fairly open with licensing relationships with the fans. Any content they create they retain the IP to. This is unlike other game companies where fan material cannot be commercially released by the fan creators and they often retain the right to take fan content without the creator's permission and commercially exploit it or release it in their own packages. Auran's approach is different whereby we think it is a good idea to talk to fans before commercially releasing their content and try to obtain their permission first. We negotiate out the relationship. Content that is on our download station, for example, is distributed under the terms of non-exclusive license. Fans who contribute this content are free to commercially exploit it or release it themselves elsewhere. Auran does not have an exclusive license to this content. The IP relationships and issues are messy, as the actors within these project networks have diverse and conflicting loyalties, values, imperatives and ethos. For example, Auran has a bottom-line imperative while for many of the fans it is about having fun making and openly sharing their creations for Trainz.

There are opposing and differing views within the Trainz fan community itself regarding IP and fan created content and I want to touch upon this quickly. The most interesting tensions within the networks are disputes between fans themselves who say 'Joe has ripped off my content and used it in his locomotive and I am not happy about that' and, as Greg has mentioned, these models are quite complex objects. What often happens is that one fan might think 'I quite like that texture that Joe's got on his locomotive, I want to take it and use it on mine'. 'Joe' might be happy about that as long as he gets credit and acknowledgements etc, but he might be very unhappy if he is not credited or acknowledged, or if that work of his turns up on another fan site being sold with someone else commercially benefiting from it.

We often get emails asking us to mediate between these fans who are having IP disputes. For example, a fan complaining 'X fan group is ripping off our content what are you, Auran, going to do about it? Please remove their content from your download station, please send them an email demanding that they recognise our rights'. We are often placed in these awkward situations of trying to mediate among fan groups and their IP disputes. One of the other really heated areas of debate among fans is the pay-ware versus free-ware conflict. Some fan creators believe all fan content should be free-ware, it should all have an open-source or creative commons type license associated with it, and fans should not be profiting from or commercialising fan content. They should not be profiting from selling content to other fans. The argument here is that a lot of the content that fans create benefits from the feedback and input from a quite big network of fans who openly and freely share information. For example, tips and tricks about how to create this content. For these creators to then commercialise that content and restrict it in some way is not the right thing to do, at least this is the view of some fans

Here are some comments posted to the Trainz forum by two fairly influential content creators. One is from John Wheelan, and the other is MagicLamb, that is his handle or nickname on the Trainz forum. John Wheelan asks:

> I have difficulty with copyright and Trainz. How many of our models carry a railroad or railways copyrighted logo? How may textures have been borrowed without the original copyrighter's permission? How many content creators can say that they have not looked at how someone else has done something?

John is getting at how the content creators rely on this network of collaborative peer creativity that they draw on; often without permission. But MagicLamb comes back and says:

> it is all a matter of giving credit where credit's due. There is a trend lately, and many other content creators agree with me, to just use whatever you want whether you have the rights to or not. It is not all about getting as much content out for Trainz as possible. It is about people who put in long hours for nothing to get the recognition they deserve. Some content creators do not care what you do with their work, some do. Their wishes do need to be respected.

You can see that the IP issues, the digital rights management issues, that are emerging through these peer distributed production networks are quite complex, quite convoluted, and sites of quite heated debate (I moderate the Auran forum and I often have to shut down threads and warn people who end up calling each other rather nasty names). Hopefully there are researchers here who may produce work in the not too distant future that may have some benefit for these fan creators and may provide them with models to work through these difficult IP issues and relationships.

I want to end with one more quote from a fan creator. This guy is talking about how much he loves the Trainz software and the community precisely because of its creativity and its open and collaborative mixing of materials and how it generates innovation through this process. He tells of how a particular project was undertaken by openly using each others content. He talks about it as being 'unashamed plagiarism, pretty much driving this community' and that is one way of putting it, that is his way of putting it. And yet this 'unashamed plagiarism' is generating so much creativity and innovation that companies like Auran are commercially benefiting from.

This raises a lot of issues about Auran's accountability to these networks. How we are accountable to the fans and need to work closely with them in an ethical and open way. I would argue Auran offers a best practice example of how that can be done, although there are still areas where we can improve significantly. We have got it wrong in the past in some areas and need to learn from those mistakes. At this point I will throw over to the lawyers to talk about ways of thinking through these really interesting IP issues: the commercial and the non-commercial, the proprietary and the non-proprietary and the way they come together in these very messy unruly networks.

**Legal Issues WITH PROFESSOR BRIAN FITZGERALD**

A starting point is the notion of virtual worlds and legal rights, and the other is user-led production and the way that we can allocate legal rights. There are key issues about constitutional-type rights in these virtual worlds. I remember in the mid-90s when lawyers started to deal with the Internet, there were arguments about the Internet being a legal jurisdiction – *Lex Internet* – that were put forward in a famous article by Johnson and Post about the Internet being its own jurisdiction.[217] And there is an interesting US case early on called *US v Thomas*.[218] Allegedly obscene material was uploaded from California but it was accessible in Tennessee and under the US law, obscenity took its definition from the local area, and these people tried to argue (California was much more liberal, Tennessee was a bit more conservative) that they had actually inhabited a sort of virtual world and where they had uploaded the pornography was really another space.

At that time it seemed a little bit remote and it was only a few people who were saying, "there is something in this argument". Today when you look at the games' environment there is certainly a strong argument coming forward that virtual worlds are throwing up real constitutional-like issues because people are inhabiting these spaces for an incredible amount of time. It is the reconciling of the real space jurisdiction with the virtual space that is difficult.

We see a process of development within a lot of these computer games environments which utilises IP relating to copyright, patent and trademark arise. When you have this sort of layered idea of authorship and user-led production, you have got this question about where the intellectual property rights, particularly the copyright, actually resides. Someone may develop a platform in which they have copyright and someone else may layer some content on top of that. We are looking at a sort of individual authorship, a joint authorship, and even depending on which one of those we say we are looking at, how are we reconciling the rights?

In a lot of the end user licence agreements that are wrapped around user rights in these games, we are seeing this idea of intellectual property rights

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[217] David Johnson and David Post, 'Law and Borders – The Rise of Law in Cyberspace' (1996) 48 *Stanford Law Review* 1367.
[218] *United States of America v Robert Alan Thomas and Carleen Thomas* 74 F. 3d 701 (US App6th Cir, 1996).

being negotiated, or transacted. In many of these end user licence agreements we may see things like: you can come onto this platform and you can contribute to it in a manner of user production, but we want to claim all the IP rights. It is almost like an automatic assignment of copyright that is implemented through the end user licence agreement. Intellectual property law says that there is nothing wrong with a person who creates something, assigning that copyright to someone else. That happens all the time, particularly in publishing and so on.

There are some interesting arguments here and it throws up this whole issue we spoke about before: the intersection between copyright and contract – how contract can be used to restructure the rights of a copyright owner in various transactions. Some of the key legal issues that are arising here, and the points that we looked at when we wrote the article together, were how contract and IP rights in the games area are actually working together. Auran has some very interesting licences. They are beneficial and probably best practice style licences for their user producers where they give a lot of leeway to the people in terms of their IP rights and exploitation. There are other examples which are much more restrictive and are like automatic assignments where everything that is done is appropriated back to the platform company. That is a critical issue.

There is also this whole virtual economy that is thriving and people who are contributing to games are actually creating objects of worth. Recently reported in the papers here and overseas is this idea of someone selling a virtual island for US$26,000. People are actually trading in virtual property to create wealth and it is a very real economy.[219]

**Recent Examples WITH NIC SUZOR**

Moving away from the question of property, I want to discuss three emerging issues concerning clashes between players of games and copyright owners, whether in the game itself, or in third party material. The first two examples come out of two cases in the US, and the third is the

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[219] Edward Castranova, 'On Virtual Economics' (2003) 3 *Games Studies. The International Journal of Computer Games Research* 2. For example, the virtual "Entropia Universe" allows users to shift wealth between the virtual and real world at an exchange rate of 10 Project Entropia Dollars (PED) = $1 US. An Australian fan purchased an island on the world of Calypso for $265,000 (PED) – a cost of $26,500 real US dollars – and has already made his money back from other users investing in his virtual property.

legal standing of the highly innovative filmmaking technique 'machinima', which uses computer games as an animation platform.

**Blizzard v bnetd**

Blizzard make several popular games, including Warcraft, Diablo and Starcraft. Online multiplayer in these games is limited to using Blizzard's Battle.net service. Battle.net provides a mechanism for users to create and join multi-player games, to meet and chat with other users, and to record statistics and participate in tournaments. Battle.net functionality is built into the games. Blizzard's Battle.net servers check the validity of users' cd-keys when a user connects to the service from within the game. This validation is known as the 'secret handshake' which allows only users with valid cd-keys to continue connecting to Battle.net.

Blizzard's End User License Agreements on the games themselves state that a user may not "in whole or in part, copy, photocopy, reproduce, translate, reverse engineer, derive source code, modify, disassemble, decompile, create derivative works based on the Program, or remove any proprietary notices or labels on the program without the prior consent, in writing, of Blizzard".[220]

Blizzard's Terms of Use on Battle.net state that a player may not:

1. copy, photocopy, reproduce, translate, reverse engineer, modify, disassemble, or de-compile in whole or in part any Battle.net software;

2. create derivative works based on Battle.net;

3. host or provide matchmaking services for any Blizzard software programs or emulate or redirect the communication protocols used by Blizzard as part of Battle.net, through protocol emulation, tunnelling, modifying, or adding components to the Program, use of a utility program, or any other technique now known or hereafter developed for any purpose, including, but not limited to, network play over the Internet, network play utilizing commercial or non-commercial gaming networks, or as part of content aggregation networks […]

4. use any third-party software to modify Battle.net to change game play, including, but not limited to cheats and/or hacks;

5. use Blizzard's intellectual property rights contained in Battle.net to

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[220] *Davidson & Associates v Jung* 422 F.3d 630 (8th Cir. 2005) 5 (at footnote 4).

create or provide any other means through which Blizzard entertainment software products […] may be played by others, including, not limited to, server emulators.[221]

6. The defendants were frustrated by the poor performance of Blizzard's Battle.net service, as well as cheating and otherwise offensive players. They subsequently began free development of bnetd, which would act as a replacement server for Battle.net which gave users more control over the games they played online. To create bnetd, the defendants had to reverse engineer the protocol spoken by Battle.net and the Blizzard games, and they also developed a small utility which was used to modify the Blizzard games so they could connect to other multiplayer servers. Notably, the defendants had no way of enforcing the cd-key validity check, and were forced to treat any cd-key presented as valid.

The district court granted summary judgment to Blizzard, holding that fair-use reverse engineering could be excluded by terms in shrink-wrap or click-wrap contracts, and that the reverse-engineering exceptions in the DMCA do not protect reverse-engineering in order to create fully functional alternative products, or where the program is distributed for free.[222]

The Eight Circuit Court of Appeals affirmed the decision. Blizzard's EULA and ToS were enforceable contracts, and the defendants had waived any fair-use defence they may have had.[223] The 'secret-handshake' constituted an effective Technological Protection Measure (TPM), and bnetd circumvented that TPM by allowing all clients to connect. The 'interoperability' exception did not apply, on the basis that the bnetd emulator allowed unauthorised copies of the Blizzard games to be played on the bnetd.org servers. The court considered that this constituted infringement of copyright, and as such, the interoperability defence could not apply. The Court did not consider whether bnetd was a dual use technology which could have both infringing and non-infringing uses, or whether the playing of an infringing copy of a game on an internet server constituted copyright infringement at all.

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[221] Ibid 6 (at footnote 5); see Blizzard Entertainment, *Battle.net Terms of Use* (2006) <http://www.battle.net/tou.shtml> at 4 September 2006.
[222] *Davidson & Associates v Internet Gateway* 334 F. Supp. 2D 1164 (E.D. Mo., 30 September 2004).
[223] *Davidson & Associates v Jung* 422 F.3d 630 (8th Cir. 2005).

**The Australian position**

In Australia, reverse engineering to make interoperable products is protected as an exception to copyright by *Copyright Act* s 47D. Section 47H provides that section 47D, which was inserted by the *Copyright Amendment (Digital Agenda) Act 2000*, can not be excluded by contract. In Australia, Blizzard could not require that its users refrain from reverse engineering.

Reverse engineering for interoperability is also an exception to circumvention of a technological protection measure, in s 116A(3), where a 'qualified person' is permitted to circumvent a TPM for a permitted purpose, which includes interoperability from s 47D. A qualified person in this case would mean the owner or licensee of the copy of the game. Section 116A(4)(b) provides a similar exception for supplying a circumvention device.

There is nothing in the text of the anti-circumvention law that prevents the right to reverse engineer for interoperability from being excluded by contract. The exceptions to infringement in s 116A are not protected in the same way as s 47D protects ss 47B(3), 47C, 47D, 47E and 47F. This case shows that this gap in Australian anti-circumvention law can have real consequences for Australian developers. Reverse engineering for interoperability is an important exception to the exclusive rights of the copyright owner, in that it provides developers with a mechanism to make competing products, or to adapt a technology product to work in new environments.

These exceptions are important – they concern not the piracy of games, but the right of players to make use of their lawfully acquired games in the way they want. A player who purchases a game which doesn't work satisfactorily with another product, like an internet game server, should not be precluded from seeking to play the game on another interoperable server. The right to use a game is a fundamental right of a purchaser of a copy of that game, and if the game must be reverse engineered in order to enable its use, then that reverse engineering should be permissible.

Both the CLRC *Copyright and Contract* report and the Philips Fox *Digital Agenda Review* recommended that the *Copyright Act* be amended so that the permitted purpose exceptions in s 116A(3) cannot be excluded by

contract.[224] If these recommendations are not followed, there is a significant risk that the ability to create interoperable software in Australia will be crippled, and producers of computer games will be able to require that purchasers of their games are tied to their other software products and services in order to make use of the games.

## Marvel v NCSoft

NCSoft and Cryptic Studios are the creators of a popular Massively Multiplayer Online Role Playing Game (MMORPG) in which players create superheroes and do battle with the forces of evil. Marvel are publishers of comic books, one of the two production houses credited with creating, or at least resurrecting, the superhero genre.[225]

Marvel alleged that NCSoft had "created, marketed, distributed and provided a host environment for a game that brings the world of comic books alive", not by the creation of new or original characters but, by directly contributory and vicariously infringing upon Marvel copyrights and trademarks".[226] Marvel pointed to the character creation process in City of Heroes, which allows players to design their own superheroes, and, with some work, replicate to some extent the likeness of well known protagonists of Marvel's comic books. Marvel alleged that the flexibility in the character creation system empowers users to infringe their valuable copyrights and trademarks.

The claim is alarming. For years, children have role-played with the

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[224] Copyright Law Review Committee, *Copyright and Contract* (2002) [7.50] <http://www.ag.gov.au/www/clrHome.nsf/AllDocs/RWP092E76FE8AF2501CCA256C44001FFC28?OpenDocument> at 4 September 2006; Philips Fox, *Digital Agenda Review* (2004) 113 <http://www.ag.gov.au/DigitalAgendaReview/reportrecommendations> at 4 September 2006.

[225] See 'Marvel Comics' on *Wikipedia* <http://en.wikipedia.org/wiki/Marvel_Comics> at 4 September 2006. The other similarly large production house is DC comics: see 'DC Comics' on *Wikipedia* <http://en.wikipedia.org/wiki/DC_Comics> at 4 September 2006.

[226] Second Amended Complaint, *Marvel Enterprises v NCSoft Corporation* (25 January 2005) *CV 04-9253-RGK* (PLAx) available at <http://www.eff.org/IP/Marvel_v_NCSoft/> at 4 September 2006. Most of Marvel's claims for direct and indirect trademark infringement were dismissed by the District Court, except for direct infringement of a common law trademark: see *Marvel Enterprises Inc v NCSoft Corporation* (Unreported, *CV 04-9253-RGK* (PLAx), Klausner J, 9 March 2005) available at <http://www.eff.org/IP/Marvel_v_NCSoft/> at 4 September 2006.

characters that form their popular culture. Content producers have used advertising and merchandising so extensively that it is difficult for a child not to be immersed in a world populated by representations of these characters. These same companies encourage children to buy licensed merchandise in order to role-play with their favourite characters. For years children have played not only with that merchandise, but also with home-crafted representations – drawings, paintings, a handmade cape or costume, the possibilities are only limited by imagination. This sort of play is either a symptom of, or fuel for, the popularity of the characters depicted, and is encouraged by the production companies. However, once this role-playing moved into the digital environment, Marvel brought suit for copyright infringement.

It would be unthinkable for a production company to sue children for dressing up as their favourite comic book character and playing in the park. A shift in context to a digital environment is little different conceptually. If Marvel were successful, the ability to role-play online would have been removed to a large extent. It is difficult to reconcile how Marvel can on the one hand bombard children with images and merchandise of their characters, in the hopes of encouraging them to play with those characters, and on the other hand, bring suit to restrict those same children from playing with those characters in an unlicensed setting.

The case was settled out of court in the United States in December 2005. The terms of the settlement were not disclosed, but no changes to NCSoft's City of Heroes character generation process are to be made. Whilst this may be a win for NCSoft in this case, the fact remains that a similar case brought under Australian law may be significantly more difficult to defend.

**Primary liability in Australia**

Superhero comics, and potentially the superheroes themselves, are original artistic works for the purposes of Part III of the *Copyright Act*. Liability for primary copyright infringement will occur when a player of a game can be shown to reproduce the characters, or the characters as a substantial part of the comics, in a material form, or to communicate a substantial part of the characters or comics to the public.[227] 'Material form' includes "any form (whether visible or not) of storage of the work or adaptation, or a substantial part of the work or adaptation, (whether or not the work or adaptation, or a substantial part of the work or adaptation, can be

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[227] *Copyright Act 1968* (Cth) ss 36, 31(1).

reproduced)".[228] This broad definition will cover the creation of a character in a game, as will the definition of 'communicate to the public' in a multi-player game (to "make available online or electronically transmit").[229]

In determining whether the characters have been reproduced, the Court will look for objective similarity between the in-game character and the original superhero, and the establishment of a causal link between the original work and the in-game character.[230] Where the two characters are objectively similar, a causal connection may be inferred by the popularity and level of exposure of the original, even if the person is copying subconsciously.[231]

Where only some features of the character have been reproduced, the plaintiff will need to show that those features are substantial. The question of substantiality with respect to Part III works is determined primarily by reference to the original features that have been reproduced. Determining whether a substantial part has been reproduced will again be determined by the qualitative value of the part taken, but the emphasis is on the originality of the reproduced portions. Reproduction of a large quantity of unoriginal features is unlikely to constitute reproduction of a substantial part,[232] but reproduction of a small portion of original material which resulted from a high degree of skill and labour is likely to be substantial.[233]

Given the recent restrictive approach taken by the Federal Court in relation to substantiality in Part IV subject-matter,[234] the features of a superhero are likely to constitute an important part, or a highlight, of the artistic or literary work of a comic book. Unless the court takes into account the type of use made of the player character, it is likely that they will be seen to infringe copyright in the original superheroes. Australian players will not be able to rely on a fair dealing exception to infringement.[235] The logical conclusion is that the players will be liable to the original owner. However, owners of copyright are understandably reluctant to sue their fans for

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[228] *Copyright Act 1968* (Cth) s 10.
[229] *Copyright Act 1968* (Cth) s 10.
[230] *Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 All ER 465; *SW Hart & Co Pty Ltd v Edwards Hot Water Systems* (1985) 159 CLR 466.
[231] *Francis Day & Hunter v Bron* [1963] Ch 587.
[232] *Data Access Corp v Powerflex Services* (1999) 202 CLR 1.
[233] *Blackie & Sons Ltd v Lothian Book Publishing Co Pty Ltd* (1921) 29 CLR 396; *Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 All ER 465; *Fasold v Robers* (1997) 70 FCR 489.
[234] See *TCN Channel Nine Pty Ltd v Network Ten Pty Ltd (No 2)* (2005) 145 FCR 35.
[235] Reproduction for entertainment will not fit within exceptions for news reporting, research or study, or criticism or review.

copyright infringement. It is much less embarrassing and more convenient to achieve the same result by suing the producers of the game for secondary liability.

**Secondary liability in Australia**

Secondary liability for copyright infringement in Australia arises when a person 'authorises' the doing of any act comprised in the copyright.[236] Section 36(1A) tells us that, when determining whether a person has 'authorised' the doing of any such act, the matters that must be taken into account include:

1. the extent (if any) of the person's power to prevent the doing of the act concerned;

2. the nature of any relationship existing between the person and the person who did the act concerned;

3. whether the person took any other reasonable steps to prevent or avoid the doing of the act, including whether the person complied with any relevant industry codes of practice.

The meaning of 'authorisation' was recently considered in the Federal Court by Wilcox J in *Universal v Sharman*.[237] This case dealt with authorisation of infringement in sound recordings, but the relevant provisions in the *Copyright Act* for Part III works are worded identically. His honour considered the relevant authorities and extracted some guiding principles. 'Authorise' is to be construed according to its dictionary meaning of 'sanction, approve, countenance'.[238] Authorisation does not have to be a positive step: "inactivity or indifference, exhibited by acts of commission or omission, may reach such a degree as to support an inference of authorisation or permission".[239] Mere provision of the means of infringement is not enough.[240] Mere inactivity without knowledge will

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[236] *Copyright Act 1968* (Cth) s 36(1).

[237] *Universal Music Australia Pty Ltd v Sharman License Holdings Ltd* (2005) 220 ALR 1.

[238] Ibid 90, citing *University of New South Wales v Moorhouse & Angus & Robertson (Publishers) Pty Ltd* (1975) 133 CLR 1 ('*Moorhouse*'), 12.

[239] *Universal Music Australia Pty Ltd v Sharman License Holdings Ltd* (2005) 220 ALR 1, 90, quoting *Adelaide Corporation v Australasian Performing Right Association Ltd* (1928) 40 CLR 481.

[240] *Universal Music Australia Pty Ltd v Sharman License Holdings Ltd* (2005) 220 ALR 1, 98; *Copyright Act 1968* (Cth) s112E.

not be enough.[241] Mere knowledge is not enough.[242] An implied general permission or invitation does not require specific knowledge.[243]

In *Universal v Sharman*, Sharman Networks was found to have authorised the mass infringement of copyright in sound recordings by providing the software for the Kazaa peer-to-peer filesharing network. The two most important factors considered were that (1) Sharman provided the facilities for infringement; and (2) Sharman had knowledge that Kazaa was being used predominantly to share copyright works.[244] Wilcox J did not accept that there was a large proportion of legal filesharing traffic.[245] It was not important that Sharman did not have actual knowledge of infringing acts, merely that it knew that a major proportion of traffic must be infringing.[246]

Next, Sharman had a financial interest in increasing filesharing, because of increased advertising revenue. Because most filesharing is infringing, Sharman therefore had a financial interest in high rates of infringement.[247] Sharman did nothing effective to curb the illicit filesharing on their networks.[248] Sharman ran some campaigns which implicitly promoted illicit filesharing.[249] Critically, Wilcox J found that Sharman could exercise some degree of control over its users.[250]

In *Universal v Cooper*,[251] Cooper operated a website where other parties could post hyperlinks directing users to remote websites where infringing sound recordings could be downloaded. The Federal Court found that Cooper had knowledge of the infringing material, his website facilitated the infringement of copyright, and he had power to exercise some control over the links, but did not do so.[252] Accordingly, Cooper had authorised the infringement of copyright in the sound recordings, notwithstanding that

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[241] *Adelaide Corporation v Australasian Performing Right Association Ltd* (1928) 40 CLR 481.
[242] *Universal Music Australia Pty Ltd v Sharman License Holdings Ltd* (2005) 220 ALR 1, 90, citing *Nationwide News Pty Ltd v Copyright Agency Ltd* (1996) 65 FCR 399, 422.
[243] *Moorhouse* (1975) 133 CLR 1, 21.
[244] *Universal Music Australia Pty Ltd v Sharman License Holdings Ltd* (2005) 220 ALR 1, 49, 98.
[245] Ibid 49.
[246] Ibid 50.
[247] Ibid.
[248] Ibid 99.
[249] Ibid 98.
[250] Ibid 100.
[251] *Universal Music Australia Pty Ltd v Cooper* (2005) 65 IPR 409.
[252] Ibid 429.

none of the infringing material was hosted under his control, or that the links to the websites hosting the infringing material were placed on his website by other users.

Although the decisions in *Universal v Sharman* and *Universal v Cooper* were confined very tightly to the facts of the cases, we are able to see how the same principles could be applied to find a computer game manufacturer liable for secondary copyright infringement. NCSoft provides the means of infringement, could be shown to know of the infringement (depending on how prevalent it is), and have the power to stop such infringement (MMORPGs are much more tightly controlled than distributed filesharing networks). It is also possible that NCSoft could be shown to engage in tacit promotions of infringement in their advertising materials.

The fact that NCSoft's game obviously has many non-infringing players may be the crucial point in any such litigation. In this case, the game developer could probably successfully argue that it should not be held responsible for the infringing behaviour of a small number of its players.

NCSoft in this case may be able to escape secondary liability in Australia. However, we must consider whether this is the approach we want to take when we are shaping our digital environments. Are we certain that we only want people to be able to role-play with their favourite media icons in spaces which have been licensed by the appropriate publishers? If a provider of a virtual world made a space (like a park) where players could express themselves as they wanted, should they be liable when a significant portion of those players express themselves in ways that draw on copyright portions of their popular culture?

The disadvantages to such an approach are significant. Primarily, only people who have the ability to pay pop-culture creators have the opportunity to play – at least in the offline world, merchandisers cannot (completely) stop children from using their imagination or someone else's toys to role-play. Next, we lose a great potential for creative re-expression – the environment must be controlled by the owner or a licensee, meaning that the potential for expression is limited to their ideas of 'safe' playing with iconic characters. We also lose the ability for players to mix genres and media – Marvel characters will be segregated not only from DC Comic superheroes, but also dinosaurs, spacemen, and Walt Disney characters. The qualitative value of play is reduced because it is confined to the boundaries of corporate merchandisers.

The better solution is to exempt this type of play from copyright infringement, either by determining that it does not reproduce a substantial part of the original works, or that it should be excused as a fair dealing or fair use of material. Unfortunately, current Australian law does not support such an approach.

**Machinima**

Machinima is the art of filmmaking using computer generated graphics in real-time virtual worlds. Unlike traditional animation, machinima makes use of readily available virtual worlds, typically computer games, where "characters and events can be either controlled by humans, scripts or artificial intelligence".[253] Machinima allows filmmakers to use a pre-existing physics engine (and artwork, characters, and scenery) from a video game in order to develop a compelling story, without the high costs associated with either live-action filming or traditional animation. Essentially, the actors in a machinima film are able to use the game's controls to express themselves, bringing their characters to life through acting, rather than animation. The output of the game, from the point of view of one of the actors or a dedicated camera operator, is captured on a computer for later editing. Because the animation in a game is somewhat limited as to the expressions and movements of the characters, the voice acting and soundtrack that is added to the film plays a very important role in setting the mood.

Machinima involves the re-purposing of computer games for the creative expression of filmmakers. As a film technique, machinima has distinct advantages which are readily apparent. The equipment required is relatively inexpensive consumer hardware and software. Many of the art resources of the game can be re-utilised, meaning that the filmmakers can focus on the important aspects of acting, filming, and editing. Characters can be controlled by actors in real-time, instead of painstakingly animating each movement. Given the considerable budgets of films produced today, machinima provides an excellent avenue for filmmakers to express themselves on an extremely low budget.

The problem faced by machinima filmmakers is that there is great uncertainty as to their legal rights to create and distribute their films. Computer games are both literary works and cinematograph films in

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[253] Machinima.org, 'What is Machinima? – The Machinima FAQ' <http://machinima.org/machinima-faq.html#what> at 4 September 2006.

copyright law,[254] and may also include original dramatic, musical, and artistic works, as well as many sound recordings. Reproduction of a substantial part of this material in a film will generally not be legal without the permission of the copyright owners. Whether a machinima film could be said to have reproduced a substantial part of the copyright cinematograph film in any given computer game is questionable; however, the copyright in the many individual elements that make up the film will almost certainly be infringed.

Most game publishers do not object to the use of their games by machinima filmmakers, and in many cases, actively encourage their development, by hosting competitions, film festivals, and even introducing features into the game specifically for filmmakers.[255] However, as machinima becomes more popular, and commercial releases of machinima films become more common place, or films which are critical or reflect poorly on the original game are created, the copyright owners may well begin to object. At that point, machinima filmmakers may find themselves in a very difficult legal situation.

Modifying the game to remove all copyright artwork is an option for filmmakers who only want to use the physics engine from the game. Many games provide developers with a way to create 'total conversions' of their game, in effect replacing all the visual elements of the game. This option, while certainly possible for some filmmakers, is generally unattractive for the majority of machinima creators. Stripping the game back to its bare physics engine is a lot of work for experienced programmers and artists. The advantages provided by the simplicity of machinima are, to a great extent lost, if in addition to directors, actors, script-writers, editors, and voice actors, the production crew must include experienced programmers and graphic designers. The game would no longer provide a ready-made framework for the creative expression of filmmakers, but would instead require many hours of intense preparatory work. A more subtle drawback

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[254] *Galaxy Electronics Pty Ltd v Sega Enterprises Ltd* (1997) 75 FCR 8.

[255] For example, *Red vs Blue* <http://rvb.roosterteeth.com> is a popular series which is created using Bungie's Halo game. Machinima in Halo was mainly possible due to a bug in the game, whereby the character model could move his weapons and arms without his head moving. When Bungie released Halo 2, they fixed this bug, but added a feature in multiplayer modes where a player can control the head independently of the gun, a feature which has no purpose or use in actual play. See Bungie.net, 'Red vs. Blue: The Interview Strikes Back' <http://www.bungie.net/News/TopStory.aspx?story=rvbinterview> at 4 September 2006.

to this approach is that the popular significance of the game itself is lost. Machinima filmmakers are often fans of the game, and often make many references to the game and the game community in the film. It is often the community that has risen around the game that provides the immediate popular outlet for the film. Removing most of the aspects that make the game recognisable would alienate the film from its heritage, and the filmmakers from their community.

If the copyright owners in computer games begin to enforce their rights with respect to machinima creators, the burgeoning industry is likely to suffer. The greatest risk is not that machinima will not be created at all, but rather that only 'safe' machinima, which is acceptable to the owner of the copyright in the game used, will be permissible. Machinima as a genre provides possibilities for many people who would not otherwise have the opportunity to express themselves in film. Its utility quickly evaporates if it becomes merely a tool for the dissemination of advertisements for the copyright owner's game or point of view.

Machinima, as a tool which provides creators with an engine of expression and a means to represent their culture, should be encouraged. Machinima isn't about infringing copyright in computer games – it is unlikely that an expressive film of this type would substitute for the game in any way. Further, computer games are generally not designed with the aim of making money from licensing their use to makers of machinima. Indeed, the attraction of the genre seems to be that it is cheap, that license fees are not payable, and that the games are attractive to the filmmakers as games first, and become vehicles for their further expression second. This may change as machinima becomes more accepted and platforms are designed specifically for use in filmmaking, but it does not seem to be the case at the moment. To use copyright law to suppress the creation of these films seems to be counter-intuitive, particularly since it is likely that only negative portrayals will be suppressed, given the gaming industry's acceptance of current films.

## Conclusion

These three examples show a theme of tension in Australian copyright law, between the interests of copyright owners, game developers, game players, and third party developers. The first example, *Blizzard v bnetd*, shows that makers of interoperable programs, which should be protected by the exceptions in Australian copyright law, are at significant risk of infringing the anti-circumvention provisions, which are not protected from exclusion

by contract.

The second example, *Marvel v NCSoft*, shows that players of games who want to role-play with their favourite characters from popular culture are likely to infringe copyright in those characters when they play online, even though their corresponding offline actions would not be likely to attract the attention or suit of the copyright owners. The shift to the online environment makes it easier for pressure to be applied to the parties in control of playing spaces, and the value of playing in these spaces may be significantly curtailed by restrictions on the subject matter of role-playing. In order to avoid this homogenisation of play in online spaces, Australian law should move not only to ensure that secondary copyright liability should generally not attach to the providers of online spaces in this manner, but that this sort of play with popular culture should not constitute infringement of copyright at all.

The final example, machinima, shows a burgeoning industry in innovative filmmaking techniques. The wide availability of computer games means that these filmmaking techniques are available to a wider range of people, allowing more individuals to express themselves creatively. The manner in which Australian copyright law reacts to machinima will determine the continued viability of the genre. If machinima is held to reproduce a substantial part of the computer game it uses, and there is no open-ended fair use defence available, then copyright owners will have a significant form of control over the content and production of machinima, greatly reducing the utility of the genre as an expressive medium by subjugating it to the interests of copyright owners.

These three issues show an imminent conflict in Australian copyright law. The Australian courts and legislature could adapt copyright law to encourage these types of creative innovation and play in the digital environment, or they could prohibit them as mere interferences with the copyright owner's property. Which approach will be taken will depend on the recognition of the tension between the rights of copyright owners and the rights of players of computer games. By recognising that copyright law should exist not only to protect investment in the production of intellectual property, but also to encourage further creativity, innovation and social interaction, a balance can be sought which both protects game developers from piracy, and also protects the right of players to play, and the ability of players to express themselves, inside and outside the games.