The Rise of 'User Creativity'
—Web 2.0 and a New Challenge for Copyright Law and Cultural Policy—

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Abstract

This paper argues that cultural policy and copyright law have paid insufficient attention to the rise of mini-creators, people who get inspiration from existing copyrighted works and add to them to create new expressions. With the various creative and distributive technologies available today, they attempt to recontextualise cultural products they consume and express themselves, but their activities tend to be on the borderline of copyright infringement. Examination of lawsuits related to video game modification in the US and in Japan will show different judicial approaches to the spread of modification devices for users, but commonly reveal the failure of copyright law to come to terms with their activities. It is suggested that copyright law should recognise their creativity and contribution to the enrichment of culture.

1. Introduction

In recent decades our Information Technology developments and network communications have progressed across the advanced economies in the world, and it has been some years since this advance has entered a new era called Web 2.0. Although this is a loosely defined term that refers to a range of technological, commercial and social practices on the Internet, at its heart is the reference to interconnectivity and interactivity of web-delivered content. An oft-quoted paper by Tim O'Reilly (2005), one of the early proponents of the term Web 2.0, initially dealt with the implications of this for design patterns and business models of computer software, but Web 2.0 has gone beyond that area. He contrasted Web 1.0 (a term used only in retrospect) and Web 2.0 by suggesting, for example, the change from Britannica Online to Wikipedia, from personal website to blogging, and more abstractly from publishing to participation. With these examples, it should not be too difficult for us to intuitively understand that Web 2.0 involves interaction and collaboration between users, and that understanding is sufficient for my purpose of introducing the rise of

‘mini-creators’ in this context.

‘Mini-creators’ are not ‘professional’ artists but are ordinary people engaged in their spare time in, for example, taking photos and manipulating digital images with relevant tools, and maintaining blogs to which the images may be posted. They are people who copy existing videos, cut and paste footage from them, add a few frames to make a collage and post it on YouTube, accessible to millions of people worldwide. The videos may lead to comments posted in personal blogs with links to them. People also ‘sample’ pieces of music, take one particular track of recorded music and mix it with their own performances, or synchronise it to the video clips they edit from TV shows.

There are hundreds of thousands of ‘fan sites’ where fans of particular television programmes, films or novels (called ‘fanvids’ and ‘fanfics’) post their own works, which often constitute unauthorised sequels to or adaptations from the originals. Relevant activities of ordinary citizens engaged in cultural production with the help of digital technologies abound in volume and variety: ‘fansubs’ (fans adding subtitles to imported videos and distributing the edited versions), Japanese *doujinshi* (fans adapting professionally-created *manga*, or Japanese comic works, and publishing their works), *manga* scanlation (fans scanning and adding translations to imported *manga*) and ‘modding’ (modifications of video games by fans) to name but a few. There must be other kinds of imaginative, creative activities taking advantage of digital technologies and networks now affordable and usable for ordinary citizens.

It would not be an exaggeration to say that the above surge of ‘user creativity’ is truly revolutionary, not only in that the creator base has expanded but also in that the distribution system has changed. In an article on social information practices and the role of copyright within them, entitled ‘Amateur to Amateur’, the authors explain in detail the ways in which the value chain of cultural production has been reorganised, a change represented by the words decentralisation and disintermediation (Hunter and Lastowka 2004). Artists and consumers alike can create something and skip the centralised control for information dissemination, conventionally invested into broadcasters, record labels and film distributors, to reach efficiently millions of people worldwide through the Internet. The distribution of cultural products is no longer a simple one-way delivery from the professional creator, through the commercial distributor, to the audience, but in Web 2.0, the flow of cultural products occurs more like a ‘mass conversation’ (Spurgeon, 2008). The boundaries between creation and

consumption, producers and users, the commercial and the voluntary, and the professional and the amateur have thus been increasingly blurred.

Despite such widespread and familiar aspects of Web 2.0 and its impact on our daily cultural lives, however, there is little reference to it in cultural policy discourse. This is understandable, considering that the lion's share of public funding to the cultural sector goes into so-called high culture, heritage and the arts, whose assets are physical, unique, analog or live, incongruent with the features of Web 2.0 described above. However, cultural policy these days includes the agenda of nurturing the creative industries (see Special Issue 11 [1] 2005 of this journal). The definition of the creative industries may be contentious, but to put it simply, industries related to Web 2.0 such as the media, film, advertising, recorded music and video games are included and probably dominant in economic terms. Nonetheless, in policy documents regarding the creative industries, there is hardly any mention of 'mini-creators', nor is there sufficient attention paid to them in the emerging academic literature on the creative industries.

This is not surprising as governments are increasingly engaged in the creative industries policy because of their potential for job creation and export and their contribution to the economy in general. For government, one salient way of helping these industries grow is considered as the strengthening of intellectual property rights, most notably copyright. In this context, 'mini-creators' are irrelevant, or may well even be enemies to the policy as their activities tend to be on the borderline of IP rights infringement. For example, many of fanvids and fanfics probably infringe the 'derivative' right of the original author (or his/her assignee).

To be fair, academic publications have been emerging in these years to discuss fandom, at least, as a form of user creativity in some disciplines, most vigorously in a particular branch of cultural studies that unusually departs from the political economy perspective (e.g. Jenkins 2006). Although the available literature unveils the variety of activities undertaken by mini-creators, it has been discussed as an analysis into audiences and their contribution to contemporary culture. The literature sees fans as active, autonomous, critically-engaging and even defiant of the interests of global media conglomerates. Such assessment is interesting in its own right, and significantly highlights the emerging practice of 'collective intelligence' (Jenkins 2006) as a new method of knowledge and information creation. However, the imminent problem that mini-creators pose copyright law is rarely discussed in this type of literature. This is

not to say that mini-creators are copyright infringers and should be seen less favourably, for the legality of their actions depends on case facts. My argument at this point is that cultural policy must acknowledge the formidable challenges to copyright law posed by the emergence of mini-creators, as the law is one of the resources that cultural policy can deploy in trying to achieve its objectives of nurturing creativity and of widening access to cultural products.

The purpose of this paper is to expand on the above argument, examining the implications of mini-creators for copyright law and, more broadly, for cultural policy. The paper will discuss the impact of mini-creators on copyright law by firstly discussing the range of mini-creation and, secondly, focusing on their activities in relation to two similar lawsuits involving video game modification brought to court in the US and in Japan. A challenge facing such an attempt in this paper is the difficulty of transporting technical details and densely developed arguments among legal scholars into a different context. Contrary to our general perception, not all legal writings—academic commentaries and judicial opinions—are inward-looking, bogged down in legalistic definitions and details; there are a large number of broadly-discussed, policy-orientated papers which cultural policy research can draw on, and the present paper is written with the latter spirit in mind. However, I still feel the need to note the caveat that the following will be presented at the expense of legal precision and at the risk of over-generalisations and an over-ambitious international comparison. Most of these would not be acceptable in law journals, but my aim is to draw out the implications of the legal issue for cultural policy.

At this point, it is necessary to explain, only to the extent necessary for the purposes of this paper, the basic rationales of copyright law in light of cultural policy principles as well as the two major 'regimes' of copyright law dividing the US (and the UK, Australia etc.) and Japan (and most of the Continental European countries etc.)[1]. Copyright is a property right subsisting in a range of cultural works such as novels, songs, paintings, films and computer programs. Today we may take it for granted, but being essentially control over information, this has been invented as a monopoly over a good that is in principle freely and publicly available. Whereas there is a 'natural rights' theory as the basis of copyright deriving from the thinking of Locke, it is more customary, particularly in the Anglo-American tradition, to explain copyright from an economic point of view. In this view, the basic principle of copyright is to provide a monopoly

[1] For a helpful introduction to copyright for non-lawyers, see Frith and Marshall (2004, Ch.1).

over information for a limited period of time, to correct market failure (i.e. to prevent free-riding and under-supply) with the purpose of encouraging further creation and dissemination of valuable works of the arts and culture. Copyright, theorised as such, has expanded since its invention by the Statute of Anne in 1710 in England, which is in fact a bundle of various rights to prohibit unauthorised reproduction, dissemination (e.g. publishing and broadcasting), adaptation (e.g. the making of a film based on a novel), public performance and so on.

The expansion and strengthening of copyright (and intellectual property [IP] in general) has been noticeable in recent years on a global scale, promoted by the US with major interests in the industries related to IP such as computer software, pharmaceuticals and the creative industries. In particular, IP protection has become a major issue of international trade negotiations. Many legal scholars (Lessig, 2008, Netanel, 2008, and Samuelson, 2003 to name but a few) have disparaged such an expansion, particularly out of concern with the freedom of expression and advancement of knowledge, which might be limited by too strong copyright protection. Quite a few economists, too, have been unsupportive of copyright (see Towse 2004; Towse et al 2008 for literature reviews). Although economists have provided the rationale of copyright mentioned earlier, they have actually been unconvinced of the need to have it in the first place; some of them have discussed possible business models in a world without copyright (e.g., Varian 2005).

For example, Breyer (1970) argued that the first distributor could recoup the costs of material acquisition and marketing and earn enough from early entry in the market before the followers come in. That might have held true in the 1970s, but the time lag for later distributors has been dramatically reduced since then, and such an opposing view seems no longer tenable. A more contemporary and apposite concern of economists and 'law and economics' commentators comes from their attention to the 'costs' of copyright, namely, transaction costs, the limitation of access to cultural products by end users (consumers) and the limitation of use to be made of the copyrighted material by future creators (Landes and Posner 1989). Thus, economists generally believe the scope of copyright, if it has to exist at all, should be set at a level to optimise the 'social welfare', in other words, to hit the right balance between the conflicting interests. For the ultimate purpose of copyright is to encourage the advancement of knowledge by providing incentives for creation whilst placing equal importance on the use of the creative products by the public and future creators.

It should be obvious by now that user creativity, the topic of the present paper, exactly sits at this point of conflict, which however has not received much attention in the existing literature. The reason may well be because copyright has traditionally been based on the protection of authors/creators against their fellow creators or against the unauthorised exploitation of their works by commercial distributors such as publishers, but less concerned with the use of copyrighted material by non-professionals in the arts and culture (Litman 1994, p.35, Samuelson 2003, p.326). The assumption that these amateurs neither count in the cultural production system nor pose a threat to the framework of copyright law is, as has already been suggested, being undermined today.

Another important principle underlying the copyright framework that is relevant to the discussion on user creativity is the notion of authorship. This is particularly strong in the civil law tradition, which in fact has a law of authors' rights, whereas in common law, the publisher's right to copy was the origin of copyright. It is standard to explain that whilst authors' rights in civil law are about the protection of authors and their works, copyright law tends to be more utilitarian, providing for the encouragement of creativity. Despite such a division, however, the development of copyright in the 19th century in Europe and the US was commonly influenced by the Romantic idea of the author being a creative genius (Woodmansee, 1994, Rose, 1993) . Such a vision is associated with one or more identifiable authors engaged in solitary, original acts of creation, hence solely responsible for, and thus exclusively deserving credit for and reward from, the creative works. Although technological developments in cultural production and distribution since the late 19th century have introduced another type of 'author' who is rewarded for risky investment he/she made, such as producers of films and sound recordings, it can be said that much of copyright law, whether in civil or common law, still depends on the idealised 'classical author'. Apparently, such a notion does not sit comfortably with rising mini-creators who tend to work by drawing on someone else's creation and in collaboration with others without anyone claiming rights to their works, as the virtues of Web 2.0 are participation, interaction, free exchange and collaboration.

With these inherent tensions and challenged assumptions of copyright law as outlined in mind, we now turn to examine the range of activities undertaken by mini-creators.

2. Mini-Creators—The Range of Activities

So far I have used general terms such as user and consumer as well as the special term mini-creator to refer to those who are not professional artists/creators or those employed in the business of distribution. Those people belong to all ages, social groups and occupations, and what they do is wide-ranging. When the term user appears in connection with Web 2.0, however, it often evokes the instances of music file-sharing and the alleged damage the music industry has suffered because of this widespread practice. Litigations related to peer-to-peer technologies such as Napster, KaZaa and Grokster centred around the architecture of the systems and the role of the operator in it (these suits were brought against those software developers who allegedly contributed to illegal copying by users on a large scale). As a result, the currently received wisdom in copyright law, cemented particularly by the loss of Grokster before the US Supreme Court in 2005 (*MGM et al* v *Grokster Ltd et al*, 545 U.S.913 [2005]), is that file-sharing of copyrighted material between unknown individuals through the Internet goes beyond what is customarily permitted or tolerated as private use in the US copyright law system. A somewhat radical view in US copyright research, however, urges that such private use should not be so denigrated as the literal reading of the law would have us believe, because people have the constitutional right to receive cultural expressions (Tushnet 2004), and because this is only about an efficient system of cultural distribution developing to take over the old system (Litman 2004) and helping the consumer to enjoy cultural products when, where and in the ways they want them.

'Users' may well be inspired by existing works of culture and engage in creation themselves and so be called 'authors' in their own right. They may draw on existing, copyrighted works, but create something that does not bear substantial similarities to the originals and qualifies as an original work protected by copyright law. What seems to divide the two contrasting examples of user activity explained above sharply is the notion of originality: the former being pure copying whilst the latter is an original, new creation. Note that 'originality' in copyright law does not mean the same as is commonly understood in cultural policy. In copyright law, it suffices if a work originates from the author and is not copied by him/her from another source (although more weight is given to 'creativity' in civil law copyright systems). Nevertheless, originality is a relational concept, resisting a bright line to be drawn between its existence and absence. What counts is the quantitative amount and qualitative substantiality taken from the underlying, existing works by the secondary creation. In other words, it is better understood as a spectrum with pure copying at one end and secondary, yet original, creation at the other.

Since the advent of Web 2.0 and the explosion of user activity taking advantage of its features, the zone between the two ends has significantly expanded and deepened. Those people whom Liu (2003) calls Active Consumers are interested in having the autonomy to decide when and in what way they consume copyrighted works, communicating what they experience to others and attempting creative self-expression in ways too small to qualify originality in their own rights, nonetheless creative and essential to making sense of what they consume. This is a challenge to copyright law because it has traditionally given the user only a marginal place, not anticipating the development of user activities at such an exponential rate on such a scale.

The expanding gray zone is a particular problem for civil law jurisdictions like Continental European countries and Japan, with the statutes tending to specify in detail permissible acts by the user that would otherwise be infringing. For example, in Japanese law, works that have already been made publicly available may be reproduced in examination papers (Article 36 [1]), or in 'school textbooks' that are authorised as such by the Minister of Education and Science (Article 33 [1]). Acts not statutorily specified as lawful, which include most of the Web 2.0 activities mentioned in this paper that go beyond the 'private' sphere, are in principle unlawful in Japan. However, the meaning of 'private' is increasingly unclear and contested, as will be discussed later in this paper. In American copyright law, too, it is a gray area because activities in this zone that seem a *prima facie* copyright infringement may well turn out to be not so, justified by the doctrine of 'fair use' in the US. Fair use must be invoked as an affirmative defence by the defendant in the lawsuit (meaning the burden of proof placed on the party claiming fair use), but the judgement on this claim is highly unpredictable, dependent on specific facts of the case and the weight of factors given in each case. Indeed, its open-ended nature has plagued judges and legal commentators, having engendered a huge volume of debates and controversies in the US legal community for decades. As Madison (2005) deplores, '[f]air use has become too many things to too many people to be of much specific value to anyone' (397).

The most interesting fanvids and fanfics (best known in relation to the *Star Trek* and *Star Wars* series) are highly original, but the gist of these fan creations is that they draw on the existing work, either video, text, sound, or character (this being contentious for its ability to be copyrighted). Therefore, on the originality spectrum, most of them would be found somewhere in the middle. Parody has similar features, taking parts of

copyrighted works to create something new, which however has tended to be decided as fair use by US courts in recent years, for being 'transformative'. The word transformative does not exist in the fair use provision in American copyright law but is a judge-created standard, particularly given weight since the parody case *Campbell* v *Acuff-Rose Music*, 510 U.S. 569 (1994). The decision adopted the proposal of Judge Leval, who has argued that fair use justification should turn primarily on the transformativeness of the challenged use, which is distinguished from mere restatement or repackaging of the original work. He believes that the use and transformation of copyrighted works 'to create new information, new aesthetics, new insights and understandings' (Leval 1990, p.1111) should work in favour of fair use finding.

Thus, it is possible and helpful to introduce another axis to have a clearer picture of these activities that relates to the degree of creativity, or transformativeness, involved in the user action. It refers to the degree to which the secondary work changes the intended meaning of, or the received interpretation given to, the original and is seen as an addition to cultural expressions. The combination of the originality spectrum mentioned earlier as the horizontal axis and this transformativeness spectrum as the vertical axis produces four zones (Figure 1). Very often, the more immediately the underlying work is evoked in the minds of audiences, the more effective the parody is, which means that parody tends to be towards the pure copying end on the horizontal axis, but can be very transformative and creative on the vertical axis (Quadrant II in Figure 1). Going back to the file-sharing of copyrighted musical works, this probably involves very little originality and transformativeness (Quadrant III). Many fanvids and fanfics may fall into Quadrant I, although the exact location will depend on each one.

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Figure 1 About Here

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As another example, fansub is a phenomenon most often associated with the import by American fans of Japanese animations, or *anime*. Japanese *anime* producers were not particularly successful in exploiting the US market in the mid-1970s and withdrew from it, whilst eager fans of this subcultural world personally arranged the import of works from Japan, added subtitles to the originals without the authorisation of the Japanese producers and distributed the new version in relatively small, limited communities of fans. Leonard (2005) argues that this underground activity has sustained interest in *anime* in the US and paved the way for Japanese producers in the export business,

reinvigorated in the 1990s. Although the act itself probably *prima facie* infringes Japanese copyright, and the fair use defence would be difficult to maintain in this case (if a suit was filed in the US, whereas there is no equivalent to fair use in Japanese copyright law anyway), fansubs went on because Japanese *anime* producers turned a blind eye to such activities. Legally speaking, however, it takes the underlying work in its entirety and adds only translation for the dialogue, thus, perhaps to be situated in Quadrant III. I do not mean to suggest, however, that a fansub is less respectable than a fanvid in Quadrant I, but rather argue that the activities in all zones in different ways contribute to the understanding of culture by users. The term creativity in relation to the user thus has a broad meaning in this paper, including even some form of pure copying. It must be borne in mind, however, that no quadrant provides a safe harbour. The transformative axis is only to help our conceptual understanding, but a high score on this axis alone does not guarantee a fair use, as the analysis takes a number of other factors into consideration.

So far I have discussed various user activities that have challenged the current framework of copyright law and tried to understand their variety by introducing a form of quadrant coordinates. The challenges of the whole to copyright are profound because copyright law has had little regard for the user, who interacts with existing cultural products for no commercial reasons but out of a need to express something different, or taking advantage of technologies to enable him/her to maximise opportunities in consumption. In the battle with peer-to-peer technologies, the music industry has resorted to provocative expressions such as ‘theft’, ‘piracy’ and ‘stealing’; whilst it deployed the technological self-defence called the Digital Rights Management (DRM) systems, it also asked the consumer electronics companies to embed copy-protection systems in their products and pressed for international legislation to ban the circumvention of technological (copy-)protection measures. However, the real tension is between blossoming user creativity and the traditional framework of copyright law that does not accommodate it, and it seems that the legal patchwork is no longer good enough. In order to advance this argument, the following section examines two legal cases involving user modification of video games in the US and Japan.

3. Video Game Modifications

3.1 Cheat Devices

In the past two to three decades, the video game has been transformed from a cottage industry catering for a minority hobby of children to a major form of global entertainment enjoyed across the world by adults as well as children and teenagers. The value of the industry, even games software in the US market alone, was US$ 9.5 billion in 2007 (Entertainment Software Association website). New games are reviewed in newspapers, and characters from some games such as Lara Croft are cultural icons (Rehak 2003), who survive transfer to different media such as film. The technological development of video games has been such that today's sophisticated games employ techniques of 3D Computer Graphics, raising the estimated average development cost per title for Playstation 3 to US$15 million or so (Takatsuki 2007). In recent years, the platform for video games has diversified to include not only game-specific machines and PCs but also the Internet, digital television and mobile telephones. Video games are of course protected by copyright, at least for their computer programs, music and moving images, and arguably for their characters. Thus, stakes are high for the industry when copyright issues arise.

As video games become more and more complicated, it can happen that players unable to go beyond a certain level of play or to reach the end feel frustrated. For them, there is a range of helps available such as strategy tips and useful codes to enter, released by the game publishers themselves or independently by third parties. Businesses, in response to this need, have developed some devices which enable the players to modify the games (mostly to make the games easier to play). Game publishers notice the emergence of such gadgets and may determine to quash them from the market by bringing copyright lawsuits and obtaining injunctions. To shed light on the tension between the copyright-holder and the private user of the copyrighted material, two cases of this kind in the US and Japan will be discussed: *Lewis Galoob Toys, Inc.* v *Nintendo of America, Inc.* 964 2Fd 965 (9th Circ. 1992) and *Konami* v *Spec Computer Inc.* (Supreme Court of Japan, Third Petty Bench, Heisei 11 [ju] 955, 13 February 2001). Briefly, the devices in question interacted with games and changed their content by interfering in the process by which the game engines were instructed to fetch data for display, although they did not change or copy the original programs of the games. If one uses such a device in playing a video game, one can, for example, increase the number of 'lives' of the protagonist or jump to the concluding part of the game, thus making the playing of the game easier. Nintendo and Konami, the game publishers in the above cases, were unhappy with the proliferation of such devices and took the

manufacturers and sellers of the devices (popularly called ‘cheats’) to court in the US and in Japan respectively, achieving mixed results.

These cases involve technically complex issues of law, as the alleged infringing acts are undertaken by private users, to which the accused contributed by offering the cheat devices. In addition, the devices work only in conjunction with pre-existing games, whilst leaving the computer programs intact. In the US, the game publisher Nintendo argued that its right to prepare ‘derivative’ works was infringed as the altered game displays were ‘derivative’ works in the meaning of §101 of the US Copyright Act, whilst Konami, its counterpart in Japan, argued copyright infringement mainly on the basis of the authors’ moral right to the integrity of his/her work (Article 20[1] of Japanese Copyright Law, see Appendix). The latter litigation strategy was employed in Japan because ‘private’ use (including the preparation of derivative works) is expressly permitted under her copyright law, whereas moral rights may be infringed even privately. In fact, to invoke the author’s right to integrity in Japan can be very effective because the protection allows the author (even corporate), regardless of whether economic copyright is still held by the author or transferred to a third party, to ban any change made on the work *against his/her will*. Considering that the international minimum standard set by the Berne Convention is the prohibition of modification prejudicial to the author’s honour or reputation, it can be said that even a subjective claim of the author often suffices to ask for an injunction and damages in Japan. In short, liability depends on whether copyrighted work has been altered and if the author dislikes it. By relying on such a right, Konami won the case before the Supreme Court that examined whether the original, designed and intended plot was changed to any significant degree by the use made of the device in question by private game players.

I now turn to examine each case. In *Galoob* in the US, the court found no derivative work because the cheat device in question (called Game Genie) did not fix any audio-visual data for outputs. It was not necessary for the court to discuss whether the fair use doctrine could apply or not, but the court went ahead anyway, and this part has been much cited in legal commentaries. The relevant provision of fair use in the US copyright law (§107) reads:

> …In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—
>
> (1) the purpose and character of the use,…;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole, and;

(4) the effect of the use upon the potential market for or value of the copyrighted work.

It must be noted that these factors are only illustrative, and courts can be highly discretionary in determining which factors to consider and how to weigh them, but the fourth factor in the statute on the market harm tends to be the most important and utilised by US courts.

In *Galoob*, the private, non-commercial nature of the use quickly formed the presumption that it was a fair use. To argue otherwise was onerous on Nintendo, but all it stated in return failed to convince the court of the economic harm it suffered. The court in fact did not find the issue of market injury complex at all, arguing that the Game Genie did not adversely affect the present market of games software for Nintendo. One had to obtain original Nintendo games in the first place. In addition, the court understood that the Game Genie even enhanced the present market for Nintendo as it could attract less experienced players by offering easier ways of playing. Nintendo denied any plan to release a device similar to the Game Genie, a statement which worked against its ability to show harm in a potential market, as did its statement that it saw no potential market for such devices.

This fair use analysis may well appear reasonable, and the decision has in effect resulted in user autonomy in making changes to the games with the help of cheat devices. The available literature that places *Galoob* at its heart has positive views about such interoperable devices, called ‘add-ons’ generally, and sees no economic harm on the underlying programs, much in the same way as the US court (Nadan 1990, Black and Page 1993, Kesler 1993, Jaffe 1998, Loren 2000). These authors support the *Galoob* decision because they believe the decision contributes to the technological development in the broader categories of computer add-ons (Black and Page 1993).

There is a problem however in such an assessment. It is that the market analysis (the fourth factor in fair use) of this case is not sufficiently strenuous and the court was too quick to dismiss Nintendo’s argument on the economic damage. Such a criticism may seem against the overall tone of this paper supporting the creative activities of the user. However, I aim to demonstrate the complexities and difficulty of the fourth factor analysis, and bring forward the argument that the heart of the problem is the excessive

reliance on the market harm logic at the expense of nonmarket factors (e.g. motives and purposes of the users) which dominate many of Web 2.0 activities. A starting point for such a two-step argument is to ask if the courts' findings that there was no commercial harm are right, why Nintendo bothered to sue device manufacturers/sellers. Nintendo of America was famous for 'being in the business of video games and litigation' (Sheff 1993, p. 259), but there still must have been some rational reasons for the lawsuits. The available literature which discusses *Galoob* is mute on this point. Ginsburg (1995, p. 1486) does mention *Galoob* as an example showing an adverse effect of private use on the copyright owner's market for derivative works, but this statement is not supported by evidence or placed in a relevant context.

It is important to note that the US definition of a derivative market is broad, allowing the copyright-holder to secure current and future markets for adopted works. For example, a novelist can authorise a film based on his/her work, or ban an unauthorised sequel work of his/her work. With this knowledge in mind, it is helpful to refer to Stern (1992) who discusses add-ons as a broader category, shedding light on the competition between the original program and an add-on program. He presents four 'scenarios' where economic damage to the rights-holder of the underlying program can occur. The first scenario is a situation where the copyright owner is in direct competition with the add-on seller. Had Nintendo sold cheat devices similar to the Game Genie, it would have been an example here. In Stern's second scenario, the copyright-holder may have two different products of more or less the same function but have different powers (e.g. one much faster than the other in processing data) and which are priced differently. The add-on device works to upgrade the cheaper (and weaker-power) program to match the expensive (and stronger-power) one. The device in such a case would undermine the price discrimination strategy of the original program maker and make the expensive program redundant (assuming that the purchase of the cheaper one and the device costs less than buying the expensive one alone).

Thirdly, an add-on program may apparently support the underlying program by patching its deficiencies. This however might encourage potential consumers to consider a different program sold by a different firm with those shortcomings sorted out already, or existing customers to migrate to another. Fourthly, in a similar vein, Stern considers an add-on program might affect the sales of later, improved versions of an underlying program by adding new features to the existing program such as useful user-interface. The underlying program maker is aware of an emerging program which overcomes the

deficiencies of its own program, but is not prepared to launch a new, similarly improved product until it is satisfied that it has extracted all the potential revenues from the inferior, earlier version, and wants to suppress the add-on program in the meantime.

Stern thus presents a range of possibilities where add-ons can do economic harm to the rights-holder of the original program. It is not that all of these interests must be protected by copyright law, but the above does undermine the general understanding that add-ons are by definition good for everyone. Stern also notes the particular apathy towards modification devices held by video game publishers, an attitude unseen among the developers of general computer applications (Stern 1991, p.208). It can be argued that this is because the game publishers believe inferior games will destabilise the balance and pace of the consumer market the industry has so strenuously built up. The low quality of available games would easily drive consumers out into a different leisure and entertainment activity, in light of the early market collapse (called the Atari shock) in the US in the early 1980s.

Whether fair use should consider such business background or not is a topic that invites extensive discussion, but for our purposes it suggests that the *Galoob* court on fair use saw the relationship between the add-on device and the underlying program of the video game in a too simplistic way. The court did not find that the Game Genie supplanted Nintendo's market, but it made no sense to examine whether the Game Genie harmed the potential market for a similar product when Nintendo saw no value in creating such a market in the first place. The damage the Game Genie potentially wreaked was on the future sales of all games, not on a cheat devices market in which Nintendo could not be interested.

Which of the present and future derivative markets should be held in control of the copyright-holder of the original work is another topic that cannot be adequately dealt with here. However, my point in discussing the economic harm argument of this case in detail has been firstly to illustrate the inherent difficulty of fair use analysis particularly in relation to derivative works. Secondly, more importantly, the point has been to argue that such difficulty derives from the heavy weight given to the economic competition and market transactions by the US copyright law. This particular case has shown a classic tension between commercial firms, both trying to maximise their economic returns from the consumer market. However, when we see the use of the Game Genie as a form of user expressivity, then it is important to recall that in this

sphere non-market, not-hierarchy driven motivation and mode of production tend to dominate (Benkler 2002), which apparently does not fit in with the established market analysis for fair use. After all, it is a regret that although *Galoob* seemed to have provided a promising way forward for interoperable devices that allow user autonomy in interacting with cultural products, it does not come from the appreciation of such activities, but only from a slippery economic analysis.

Lacking any express regard for user creativity (or even for technological innovation), thus, the case remained as a ruling that was fact-specific, and as was predicted by Black and Page (1993, p. 645), different facts and technological details found in a later case led to a different conclusion (*Micro Star* v *FormGen Inc.* 154 F3d 1107 [9th Cir. 1998]). What if a device is developed to allow the user to more actively change (i.e. transform) the game content, to make a more difficult one or an adapted version, without altering the underlying program, effectively enabling the user to edit the game? Would this still be fair use, or would it be unlawful because it would harm the market the game publisher wished to develop? The success achieved in this case is shaky and the next device with different features may prove to be unlawful, because the dominant mode of fair use analysis does not take the user perspective on board. It simply reflects the common law view that copyright is an economic property right.

We now turn to the Konami case in Japan, where the author's right to the integrity of the work was the point in dispute. As was mentioned, the Supreme Court found modifications against the will of the publisher Konami in the meaning of Article 20, and as a result modification devices have effectively been banned. A later decision on *Tecmo* v *Westside* finding infringement with a similar add-on tool to strip off the costume of the main character (Tokyo High Court, Heisei 14 [ne] 4763, 31 March 2004, cert. denied) confirmed this trend.

Legal commentators in Japan have largely been critical of the Konami decision for a variety of reasons, one of which is that this decision reduces autonomy and, to a great extent, the liberty of individuals. As mentioned earlier, even though alteration is done within the private sphere, it is no excuse for moral rights infringement, in contrast to the permission expressly given to private copying by Japanese law. Thus, video game players' freedom to play the games in the way they like where modification devices are in use have been ruled out. Commentators, considering this extreme and absurd, have suggested that the moral right protection should be narrowed by requiring that

modification must be to the detriment of the author's honour or reputation (that normally requires derogatory modification and *public* exposure of the modified work).

Whilst the suggested limitation to the moral rights provisions in Japanese copyright law is sensible, there is doubt as to whether the clear division between the private sphere and the public one is tenable in the age of Web 2.0. If 'private' means 'within the physical space of one's home', it now is connected to cyberspace. If 'private use' means distribution among a limited number of friends and family, digitally transmitted information to these people can instantly spread out to an unknown number of people in the world. What I am trying to argue is that the aforementioned criticism on the Konami decision overall seems fine, but that to base such criticism on the outdated private/public division may not win. In addition, from our point of view, although the criticism pays admirable attention to user autonomy, it is made to rectify practical nonsense, but does not originate from the positive evaluation of user creativity.

In sum, the cheat devices cases are judged differently in the US and Japan, and different drawbacks and shortfalls have been pointed out on the two approaches. However, the major, common implication of the above analysis has been that copyright law in neither country pays sufficient attention to the value of user creativity. What the users did with the devices may not have been spectacularly creative, to be placed perhaps in Quadrant III close to IV, but still qualifies as a form of user creativity. It can be said therefore that these cases have given rise to interesting legal issues of digital technology and their relation to copyright law and users' autonomy, but whether actions of similar sorts or of higher quality in creativity would be fair use in the US or unlawful in Japan remains highly unpredictable. Whilst copyright law has not squarely faced up to the implications of mini-creators, rights-holders continue to write 'cease-and-desist' letters to threaten them, resulting in chilling effects.

Nowadays in Web 2.0, game modification has developed to such an extent that fans undertake PC-games modification themselves, forming groups on the Internet, some of whose activities are actively encouraged by the game publishers. For example, modification, or 'modding', of the game Half-Life, which was a major hit title in the US, has given birth to a game entitled Day of Defeat (called DoD by fans). DoD has been programmed by 'modders' who are semi-professional, but essentially amateur, programmers of computer games. These people have set up websites to exchange ideas about how they can make Half-Life more interesting. On bulletin boards, they

have discussed such details as the historical accuracy of the designs of arms or soldiers' uniforms in the games and collaborated online to make different versions of the game, and ultimately converted it to produce a new game (Postigo 2003). The publisher of Half-Life has seen this as an advantage and supported the collaboration to the extent that it has brought in a distributor for DoD to the on-line games market. Sometimes game publishers give modders access to games' source codes. This reminds us of the Open Software movement, where people believe in the value of idea exchange and build on each other's work, in what Barbrook (1998) calls a gift economy.

Modding is now known to be a vital tool for game developers with which to assess the quality of a game from a user's viewpoint and consider possible improvements. The effectiveness of such a postmodern practice of 'maker-user collaboration' in product development has been confirmed in other industries (Jeppesen and Molin 2003, von Hippel and Katz 2002), and is being recognised in the video game sector. One may be cynical of this 'collaboration', calling it a corporate strategy of cooptation, but that view may well underestimate fans as naïve and uninformed. The negotiation between the user and the producer itself would be an interesting form of cultural politics; why should we not let it go on? As Samuelson (1993, p. 103) notes, '[a]lthough many authors might prefer for their works to remain as fixed as they have traditionally been in printed form, the genie of plasticity cannot be pushed back into the bottle. Digital manipulation is here to stay'. The majority of the big, global players in the industry will persistently quash suspects in the market by taking legal action and/or by taking over the originator of the new, unwanted technology to effectively prevent its proliferation. However, digital entrepreneurs will continue to emerge to destabilise the status quo, making openings for even more possibilities for user creativity. These developments will continuously pose challenges for copyright law to respond to.

Conclusion

This paper has pointed out that copyright law is rarely concerned with mini-creators, people who get inspiration from existing copyrighted works and add to them to create new expressions, attempting creative self-expression and reflectively understanding existing cultural products. Their absence in the larger cultural policy framework (of which copyright can be an instrument for policy) is also noteworthy, but it is more problematic for copyright law specifically, as Web 2.0 activities of users constitute a huge gray zone of unlawfulness in copyright law of any country. As Rojas (2002)

considers, fanvids, fanfics as well as music sampling are the re-interpretation and re-contextualisation of cultural icons. These are activities that copyright law and cultural policy should celebrate and support, but both of them are rooted in individual creativity rather than collective and collaborative one, and cannot accommodate the latter. I am not the first one to make such an argument; such a perspective is gaining momentum in the legal scholarship in the US where even pure copying in a private capacity for non-commercial purposes is seen to serve an important objective of copyright to encourage people to read, view and listen (Litman 2007, Tushnet 2007). The present paper however has reconfigured their arguments with the aim of contributing to cultural policy research, where legal issues tend to be little discussed despite their prime importance particularly in policy relating to the creative industries.

Cases of video game modifications have been introduced, where the points at issue included whether the cheats created derivative works in the US and whether their use infringed the authors' moral right to integrity in Japan. With the lack of legal clarity inherent in fair use in the first place in the US and the difficulty of economic analysis in it that courts often fail to overcome, the cheat device survived, but the future for creative activities of users remains uncertain. Copyright law in principle treats market transaction of cultural products, but it has not come to terms with nonmarket motives and transactions that characterise so much of user creativity (Tushnet 2007, p.167). One might be led to hope that moral rights arguments, to which economic concerns are essentially irrelevant, may suggest a different approach to this issue in Japan. The approach indeed is different, but the decision in the case in Japan has effectively shut down the use of cheat devices for video games. With strong protection afforded to the author's moral rights, Japanese copyright law has revealed its limitation in responding to the expansion of user creativity.

The challenges of digital culture to copyright are frequently discussed in relation to how we might protect copyright owners' economic interests and expand (or limit) authors' moral rights particularly in civil law countries, but more focus should be placed on the user creativity discussed in this paper. As has been argued, it is one of the most formidable challenges to copyright law, involving a new dimension of creativity to the current world of copyright inhabited by professional authors and commercial distributors. The view that copyright is an instrument of cultural policy requires us to go back to the ultimate purposes of cultural policy, i.e. to support creativity (of whomever) and to encourage enjoyment of creative works that ranges from passive

consumption to interactivity with them.

Appendix: Japanese Copyright Law

Extract from *Copyright Law of Japan*, trans Oyama, Yukifusa et al, Tokyo, Copyright Research and Information Center, 2004.

Article 20 (1) The author shall have the right to preserve the integrity of his work and its title against any distortion, mutilation or other modification against his will.
(2) The provision of the preceding paragraph shall not apply to the following modifications:
…
(iv) other modifications not falling within those mentioned in the preceding three items, which are deemed unavoidable in the light of the nature of a work as well as the purpose and the manner of exploiting it.

Article 32 (1) It shall be permissible to reproduce in school textbooks ("school textbooks" means textbooks authorized by the Minister of Education and Science or those compiled under the authorship of the Ministry of Education and Science to be used for the education of children or pupils in primary schools, junior or senior high schools or other similar schools; the same shall apply in next Article) works already made public, to the extent deemed necessary for the purpose of school education.

Article 36 (1) It shall be permissible to reproduce, or make the public transmission (excluding the broadcasting or wire diffusions, and including the making transmittable in the case of the interactive transmission; the same shall apply in next paragraph) of, a work already made public as questions for an entrance examination or other examinations of knowledge or skill, or such examination for a license, to the extent deemed necessary for such purpose; provided, however, that such transmission does not unreasonably prejudice the interests of the copyright owner in the light of the nature and the purpose of the work as well as the form of the transmission.

(8,408 words including the Appendix and excluding the Abstract and the References)

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Figure 1. Variety of User Action in Interacting with Cultural Products