

Mediating Contradictions of Digital Media

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“How many fingers do you see?” Arthur asked Patch Adams, sticking out four fingers.

“Four,” Patch replied.

“No no!” said Arthur.¹

INTRODUCTION

Digital media enable multiple forms of end user creativity including original productions that appear in media such as blogs, wikis, machinima, and YouTube videos. Since their earliest inception, online video games have incorporated a form of end user creativity known as “modding,” establishing a space in which end users are free to personalize and customize games through the creation of small software programs or “mods.”² Many video game companies allow end users to make use of programming tools to modify and enhance games in terms of user

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1. PATCH ADAMS (Universal Pictures 1998).

2. Yong Ming Kow & Bonnie Nardi, *Culture and Creativity: World of Warcraft Modding in China and the U.S.*, in ONLINE WORLDS: CONVERGENCE OF THE REAL AND THE VIRTUAL 21, 22–25 (William Sims Bainbridge ed., 2009); Peyman Oreizy, Open Architecture Software: A Flexible Approach to Decentralized Software Evolution (2000) (unpublished Ph.D. dissertation, University of California, Irvine) (on file with Ayala Science Library, University of California, Irvine); Walt Scacchi, *Computer Game Mods, Modders, Modding, and the Mod Scene*, 15 FIRST MONDAY (May 3, 2010), <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2965/2526>.

interface and functionality. The companies provide specific technical mechanisms for end user extension, such as an Add-Ons folder into which users insert the mods they wish to use. If modders distribute their mods for free, as many do, other users stand to benefit from improved game play at no cost. The corporate game developer benefits from a better, more tuned product and increased sales.

However, many difficult questions with no straightforward answers inhabit such digital media environments. For example, ownership rights to digital artifacts developed by end users but based on the remixing or alteration of copyrighted materials cannot be clearly defined.³ Boyle argues that with the many different actors, technologies, and contexts that comprise digital media, we should analyze each instance of an ownership contest concretely and individually.⁴ We do that in this paper through an analysis of modding in the game World of Warcraft (WoW), a popular online video game with large player bases in the United States and China.

We examine fundamental contradictions of digital media from activity theory perspectives. Evald Ilyenkov, a Russian philosopher, extends Hegel's dialectical logic to propose a way to solve social contradictions. According to Ilyenkov, a contradiction is "a direct coincidence of two polar mutually exclusive opposites."⁵ Foot and Groleau describe contradictions as systemic discrepancies in social systems that contain potential for development of these systems: "[T]he general dynamic of contradictions [is] 'growth buds' rather than . . . point[s] of failure, deficits or even problems to be solved. . . . [C]ontradictions reveal the growing edges of the activity system where development is possible and likely to take place."⁶

Using the works of Ilyenkov and Foot and Groleau, we apply the notion of contradiction to the realm of digital media to theorize a discrepancy between two social systems regarding an attribute of a digital artifact that impedes both social groups from drawing mutual benefits.

An attribute can be anything that defines usage of the artifact, such as how much it can sell for, whether it can be sold at all, to whom it can be redistributed, to what extent it can be modified, and in what contexts it can be used. For

3. Dan L. Burk, *Authorization and Governance in Virtual Worlds*, 15 FIRST MONDAY (May 3, 2010), <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2967/2527>; Yong Ming Kow & Bonnie Nardi, *Who Owns the Mods?*, 15 FIRST MONDAY (May 3, 2010), <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2971/2529>.

4. James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 LAW & CONTEMP. PROBS. 33 (2003).

5. EVALD VASILIEVICH ILYENKOV, *THE DIALECTICS OF THE ABSTRACT AND THE CONCRETE IN MARX'S CAPITAL* 263 (1982).

6. Kirsten Foot & Carole Groleau, *Contradictions, Transitions, and Materiality in Organizing Processes: An Activity Theory Perspective*, 16 FIRST MONDAY (June 6, 2011), <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3479/2983>.

example, a company may be concerned about the side effects a player-created video game strategy guide has on brand image and user experience.⁷

If user-created content held no value for commercial interests, there would be no contradiction. A contradiction arises in the case of the player-created guide because, on the one hand, it holds value for customers, while on the other hand, its content is not under corporate control. Companies can of course make use of legal remedies or lock down their technological platforms to prevent user media production entirely. But such drastic legal and technical solutions are often unattractive. The company forfeits gain from end user creativity. Thus a systemic contradiction arises and persists.

We have previously suggested that the source of a contradiction is the existence of incompatible ethics within two social groups.⁸ This perspective indicates that actors who belong to a social group act according to the group's ethics. For example, attorneys are hired to protect a corporation's financial interests, and game developers are hired to develop popular games. However, end users who have created and distributed media (such as mods) out of goodwill may not see eye to eye with corporate ethics. Users' ethical values, such as those that favor nonprofit distribution of user-created content, contradict corporations' interest in profits.

In many Internet communities, a common reaction to a contradiction is to support one set of ethics at the expense of the other. *A Declaration of the Independence of Cyberspace*, written by John Perry Barlow, a political activist and co-founder of the Electronic Frontier Foundation, is one such reaction. The first paragraph of the *Declaration* reads,

Governments of the Industrial World, you weary giants of flesh and steel,
I come from Cyberspace, the new home of Mind. On behalf of the
future, I ask you of the past to leave us alone. You are not welcome
among us. You have no sovereignty where we gather.⁹

The *Declaration* circulated in 1996 in response to the U.S. government's passage of laws regarding the Internet. The *Declaration* insists that governments and companies leave Internet visionaries alone. The argument that these institutions should keep away from Internet development is partially supported by studies suggesting that application of patents and other mechanisms of intellectual property can impede digital media development.¹⁰

7. Dan L. Burk, *Copyright and Paratext in On-Line Gaming*, in EMERGING ETHICAL ISSUES OF LIFE IN VIRTUAL WORLDS 33, 34–36 (Charles Wankel & Sean Malleck eds., 2009).

8. Kow & Nardi, *supra* note 3.

9. John Perry Barlow, *A Declaration of the Independence of Cyberspace*, ELECTRONIC FRONTIER FOUND. (Feb. 8, 1996), <https://projects.eff.org/~barlow/Declaration-Final.html>.

10. Debrah Meloso et al., *Promoting Intellectual Discovery: Patents Versus Markets*, 323 SCIENCE 1335 (2009); Andrew W. Torrance & Bill Tomlinson, *Patents and the Regress of Useful Arts*, 10 COLUM. SCI. & TECH. L. REV. 130 (2009); Michael Meurer & James Bessen, *Do Patents Perform Like Property?* (Boston Univ. Sch. of Law, Working Paper No. 08, 2008).

Convergence culture is the emerging culture of digital media wherein corporate practices interact with practices of user production.¹¹ Dijck and Nieborg argue that by paying attention only to end users who develop media and not acknowledging other actors, such as corporations, new media researchers are straying further from understanding the big picture of the digital media environment.

We think that new models of convergence culture demand new modes of divergent criticism, unraveling the strategies of cooptation. Rather than defending or attacking the cult(ure) of participation, mass creativity or cocreation, we urge a more critical awareness of the socioeconomic implications of these emerging trends. Despite the convergence of companies, business interests, technological platforms, cultural actors and other agents, it remains essential to untangle the succinct positions and interests of various players.¹²

We suggest that contradictions be analyzed as occurring in linked digital ecologies. An ecology in this sense is a system of people, practices, values, and technologies in a particular local environment.¹³ A set of linked ecologies is a digital media environment.¹⁴ Figure 1 suggests that the evolution of digital media environments depends on the work of three linked ecologies: corporate management communities, designer communities, and user communities. The corporate management communities are interested in generating profits from digital media products and are answerable to their investors.¹⁵ Designer communities are interested in the technical and aesthetic aspects of digital media products. User communities are interested in media consumption. However, in convergence culture, the boundary between designer communities and user communities is blurring. Communities of designers are often made up of corporate employees, but may also include user developers, such as modders. Modders sometimes find employment in game companies and, in the process, bring modding practices and social networks from the modding community into the corporate environment.¹⁶ Some of these modders continue to participate in modding communities.¹⁷

11. See HENRY JENKINS, CONVERGENCE CULTURE 2–3 (2006).

12. José Van Dijck & David Nieborg, *Wikinomics and Its Discontents: A Critical Analysis of Web 2.0 Business Manifestos*, 11 NEW MEDIA & SOC'Y 855, 870–71 (2009).

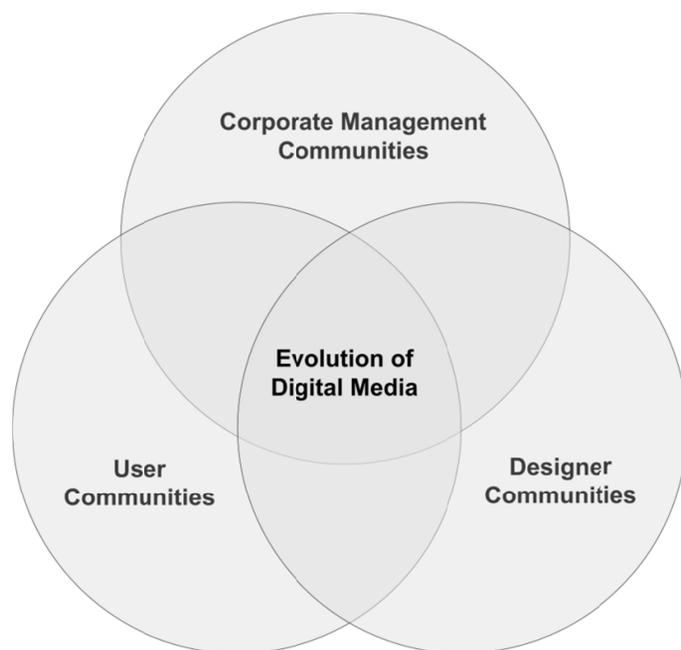
13. BONNIE A. NARDI & VICKY O'DAY, INFORMATION ECOLOGIES 49 (1999).

14. See *infra* Figure 1.

15. See F. Ted Tschang, *Balancing the Tensions Between Rationalization and Creativity in the Video Games Industry*, 18 ORGANIZATION SCI. 989 (2007).

16. Kow & Nardi, *supra* note 2, at 25–29; Hector Postigo, *Modding to the Big Leagues: Exploring the Space Between Modders and the Game Industry*, 15 FIRST MONDAY (May 3, 2010), <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2972/2530>.

17. Postigo, *supra* note 16.

Figure 1: Linked Ecologies of the Digital Media Environment

Each actor in a linked digital ecology depends on the inputs of the other actors in related ecologies in order to do well. In resolving contradictions within digital ecologies, we must be critically aware that if we side with only one actor, while turning a deaf ear to another, we may in fact bring harm to the very actor we are trying to protect. In the video game industry, many forms of user creativity are possible because companies have taken the risk of developing, at great expense, a robust product platform. End users then incrementally develop these platforms into something better. If we decided that corporate developers should not get involved in end user modification at all, user-creators would have no product platforms of value to work on and improve. As a result, in resolving contradictions within a digital media environment, it is necessary to consider the needs of all actors as parts of an interconnected whole.¹⁸

The first step to resolving a contradiction is to see the deep relationships among the actors. It seems beneficial to proceed from this step in a spirit of generosity by resisting the tendency to identify in stark, take-no-prisoners terms, who is right and who is wrong, or who is guilty and who is innocent, in order to punish or banish the wrongdoer. In other words, we should stop asking the question *who* and instead ask *why*. Why do actors in a digital media environment

18. Kow & Nardi, *supra* note 3.

act the way they do? What can we do so that all actors can act within the larger digital media environment in mutually beneficial ways?

In our previous research, we examined contradictions in the modding communities of WoW.¹⁹ The game developer is Blizzard Entertainment, headquartered in Irvine, California. WoW is available in nine languages, including English and two versions of Chinese. All language versions are the same apart from minimal graphical variations. In both the United States and China, we observed the problems that modders faced and how they resolved these problems in their respective environments.

Modding is a way for users to participate in the evolution and development of video games.²⁰ Popular games such as Starcraft, WoW, Warhammer, Lord of the Rings Online, and Runes of Magic have opened their software through application programming interfaces to enable the insertion of user modifications. Generally, mods are restricted to the alteration of a limited set of user interfaces, functions, and game contents, although some games allow extensive modification. For example, one mod made by U.S. modders helps users find their way around the virtual environment. Questhelper, a mod with 23 million downloads, inserts a red arrow and hints to guide the user to a destination.²¹ Another example is a Chinese mod that displays user interactions in chat bubbles, which are not available in the default user interface.²² Mods are hugely popular with players; millions of players download and use them.²³

We interviewed modders whose mods appear at download sites including Wowinterface, WowAce, and the Chinese WoW Developer Group (CWDG). We conducted six in-person interviews in California and nineteen in-person interviews in six Chinese cities. We also conducted nine phone and e-mail interviews with U.S. modders. We participated in online forums and chat rooms between April 2008 and January 2011. All in-person and phone interviews were transcribed and translated into English where necessary. All forum and chat-room interviews were electronically logged. Throughout this paper, we refer to our interviewees by their gaming names.

19. BONNIE A. NARDI, MY LIFE AS A NIGHT ELF PRIEST (2010); Kow & Nardi, *supra* note 2; Kow & Nardi, *supra* note 3.

20. Kow & Nardi, *supra* note 2, at 21–22.

21. *QuestHelper*, WOWWIKI, <http://www.wowwiki.com/QuestHelper> (last visited Jan. 9, 2012).

22. *BigFoot Plug-In*, 178.COM, <http://bigfoot.178.com> (last visited Jan. 9, 2012).

23. See generally T.L. TAYLOR, PLAY BETWEEN WORLDS (2006); Kow & Nardi, *supra* note 2, at 22; Hector Postigo, *Of Mods and Modders: Chasing Down the Value of Fan-Based Digital Game Modifications*, 2 GAMES & CULTURE 300 (2008); Kow & Nardi, *supra* note 2; Julian Kücklich, *Precarious Playbour: Modders and the Digital Games Industry*, FIBRECULTURE J. (Dec. 1, 2005), <http://five.fibreculturejournal.org/fcj-025-precarius-playbour-modders-and-the-digital-games-industry>; Olli Sotamaa, *On Modder Labour, Commodification of Play, and Mod Competitions*, 12 FIRST MONDAY (Sept. 3, 2007), <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2006/1881>.

THE DIALECTIC METHOD OF RESOLVING CONTRADICTIONS

Ilyenkov's theory is built on Hegel's dialectical argument that truths can only ultimately be examined in the concrete practices of everyday life, and not in abstract concepts. An example of a concrete practice is a particular media creator uploading a remixed video onto an online media site such as YouTube. An example of an abstract argument is the discussion of whether it is right or wrong for media creators to upload a remixed video for free on the Internet. Abstract concepts, such as those of right and wrong, are vague and decontextualized. They are still useful, for they are the basic elements of human thought.²⁴ But Ilyenkov suggests that these concepts should be tested against concrete reality, time and time again, to ensure that they remain a reflection of the true state of the society.²⁵ For example, we can ask how free distribution of remixed video is advantageous or disadvantageous to user creativity, media consumption, and the media industry. In activity theory, this strategy is known as "ascending to the concrete."²⁶ Ilyenkov's dialectical logic formulates social problems in such a way that conflicting facts are not made congruent by eliminating the incongruent parts, but reach resolution by pointing out the deeper relationships between the disagreements.²⁷ Ilyenkov illustrated this idea using the example of barter.²⁸ John is a yarn producer who wants to trade his yarn for a coat. Peter is a coat maker who wants to trade his coat for yarn. John wants the coat for ten yards of yarn. However, lots of yarn producers are selling yarn at the moment, and Peter wants John to give him more yarn. John does not understand that the value of yarn is dependent not on the value of his labor, but on the market situation. John thinks that Peter is greedy and is a bad man. But the fundamental issue, beyond whether Peter is right or wrong, is the deeper economic reality of supply and demand.

The solution for John and Peter, according to Ilyenkov, is to introduce a "mediating link." A mediating link is a bridge between two or more conflicting concepts. For John and Peter the mediating link is money. Money allows John and Peter to gauge the relative value of their goods in the market, so that indirectly, both attain a fair exchange value in their trade. A mediating link allows a disagreement to be re-expressed in a relative form so that an agreement may be reached.²⁹ Mediating links can exist as artifacts, or in language that facilitates cooperation in a society.

24. LEV VYGOTSKY, *THOUGHT AND LANGUAGE* 210–56 (Alex Kozulin trans., MIT Press 2002) (1986).

25. ILYENKOV, *supra* note 5, at 9–13.

26. *Id.* at 7–9.

27. *Id.* at 7–13.

28. *Id.* at 80–86.

29. *Id.* at 251–54.

CONTRADICTIONS BETWEEN MODDING COMMUNITIES
AND GAME DEVELOPERS

In the WoW modding community in the United States, we investigated how direct confrontation may be untenable in resolving contradictions.³⁰ Understanding the specific needs of individual actors and attempting to design a software system to satisfy these needs turns out to be more fruitful.

The U.S. WoW modding community confers mod ownership on the original programmer through well-established practices and clear ethical guidelines.³¹ One mod can have only one owner. Other modders can help with a mod, but cannot own a mod that currently has an active owner. Ownership has no definite duration. Ownership is transferable with permission of the current owner. It is transferable without permission if a mod has clearly been abandoned. AnduinLothar, a modder since the WoW beta, told us in an interview, “There is generally a point at which modders feel it is acceptable to resurrect another’s work and it’s significantly shorter than the traditional or legal copyright period.”

This ownership model is the linchpin of the social reward system that encourages modding creativity. Since every mod is associated with a modder’s name, the modder can gain reputation among players and other modders when the mod is successful. One way success is defined is by the number of accumulated downloads. WoW players can download mods at a handful of download sites, each of which tracks numbers of downloads. Download counts vary widely from mod to mod, from millions for some mods to just a few for others.

The owner of a mod can also decide how the mod is to be distributed: for instance, whether to offer it for sale, or whether to ask for donations.³² Although most mods are free, a small number of modders make use of these social rules to earn a living through modding.³³

But where should modders ask for such donations? Soliciting donations on the modder’s own homepage is usually pointless, as Errantor, the modder of the for-pay mod nUI, explained in the official Blizzard UI and Macro forum:

I have always had donation links on my home page [but made almost no money]. In the week and a half since I made that change [of adding an in-game request], nUI switched from being something that made \$20 a week into something I thought I could count on to put food on my table when I get laid off again in June.³⁴

30. Kow & Nardi, *supra* note 3.

31. *Id.*

32. *Id.*

33. *Id.*

34. *Id.*

Since players rarely needed to visit a download site, they were only likely to see donation requests within the game itself. Full-time modders usually develop mods of higher complexity and maintain them carefully, almost like a commercial product. ZorbaThut, a modder whose mod QuestHelper achieved an astounding twenty-three million downloads, told us in an interview:

[QuestHelper is] a lot of complicated algorithms. Most WoW UI mods are just user interface mods—new windows, new ways to display information, new interfaces. QuestHelper's completely different from that. The actual interface to Questhelper is very simple. The complex parts are the data gathering and the routing code. . . . There's [sic] only a few UI mods that do anything which is actually complicated.

Modding activities seem self-contained among modders themselves until occasional interventions by the commercial developer remind them—rudely, from the modders' point of view—that they are residing in an ecology made fragile by its links to the corporate entity. On March 20, 2009, Blizzard announced, in its official UI and Macro forum, a set of new modding policies that forbade modders from selling their mods and from seeking donations from players by placing advertisements within the gaming environment.³⁵

Blizzard instituted these policies to protect its profits by satisfying and protecting user experience needs as it saw them. Blizzard argued that mods should be available for free so that wealthier players would not be advantaged through buying mods. Blizzard further argued that mods should not elicit donations within the gaming environment so that players could enjoy an uninterrupted user experience.

The latter concern was rooted in player commentary. On a game news site, WoW.com, a player expressed worries about the intrusion of modding ads in the game:

Blizzard seems very interested in the overall user experience in their game, and they go to some lengths to ensure that the player, while playing, has a particular quality of experience. If the player has to put up with cripple-ware, nag-ware, or spam-ware, then this is detrimental to the player experience as a whole.³⁶

But, as we have discussed, the modding community's ownership system, which recognized modders' rights to distribute or sell their mods, was an integral aspect of their social reward system and their very culture. Subsequent to the new rules, several prominent modders quit or scaled down their modding work. These modders included Cogwheel, a former "Most Valuable Poster" of the UI and Macro forum, a title awarded annually by Blizzard to twelve of the most

35. Kow & Nardi, *supra* note 3.

36. Antiphonal, Comment to *Blizzard Changes Add-On Policy*, ELITIST JERKS FORUMS (Mar. 22, 2009, 10:18 AM), http://elitistjerks.com/f32/t50936-blizzard_changes_add_policy/p2/#post1160776.

outstanding posters, and Mundocani, author of several high profile mods, including two mods with more than three million downloads each.

The central issue of the conflict can be located at the heart of the terms of mod ownership enshrined in the modding community: the modders' delicate reputation system.³⁷ Many modders questioned the ethics of the corporate agenda, including Cogwheel, who saw the potential for modding to evolve into a secondary industry well beyond WoW:

While it may at first seem limited to World of Warcraft addons, Blizzard's new policy may have far-reaching effects in the world of software development. Asserting that they have a right to [prevent] addon authors from profiting from their work may ultimately affect the entire market for third-party plug-ins.

For the record, the main problem lies in [Policy] 1, in light of the threats to take legal action against anyone who disobeys. It's one thing to control what users are exposed to in-game, or to prevent addons from violating the other terms of use. But to claim they have any control over the distribution of the addon is distasteful and possibly unenforceable.

The two ethical systems—those of the modders and Blizzard—were incompatible since both held different perspectives on the right way to distribute mods and the correctness of profitability. Blizzard rationalized their logic through constructions of user satisfaction. The modders rationalized theirs through asserting the importance of innovation.³⁸

Eventually, Blizzard chose to remain silent, as if trying to wait out the initially energized community, which, over time, was slowly running out of steam. Sure enough, in two months the modders and players had moved on and the issue faded from the forums.

As a win-lose contest, the situation is fundamentally irresolvable unless one side effectively “loses the case” and backs down. However, the possibility of mediation remains. If a mediating link can help fund modding through a means other than seeking donations in-game, or selling mods, then the contradiction can reach a resolution that does not involve a total loss for one side. In the context of complex digital media ecologies, possibilities for mediation exist in both technology and policy.

On May 8, 2009, we interviewed CKKnight, a WoW modder and employee of Curse.com, a WoW download site. Curse was planning on a Curse Authors Rewards Program to reward modders based on a mod's download count and other performance indicators. CKKnight told us, “[Twenty percent] of our revenue from Curse.com is going to the authors, which is split up based on

37. Kow & Nardi, *supra* note 3.

38. *Id.*

popularity, and authors will be able to redeem [reward points] for various items such as Amazon Gift Cards.”

CKKnight further estimated that 478 modders would benefit from the program, of which 120 would be rewarded sufficiently to pay for WoW’s monthly subscription. It was not clear if any modder would be able to use the reward to mod full-time as ZorbaThat had been doing, but according to CKKnight, every modder he knew supported the new system.

The Curse Authors Rewards Program was launched on April 29, 2009 and was available to all WoW modders who opted into the program. In this model, Curse.com sold a downloading tool to end users, known as the Curse Premium Client that allowed users to download mods at a faster rate and with one click. The free Curse client required users to select each mod they wanted to download. Twenty percent of the income from the Curse Premium Client was divided up among modders based on a formula that considered download counts as the major factor.

The Curse Author Rewards Program is a mediating technology that can provide modders with room to innovate. Such technology still requires further research to determine feasibility and issues of implementation and operation, but it suggests that resolving contradictions within new media ecologies does not always require one side to lose totally or back down.

CONTRADICTIONS BETWEEN CHINESE MODDERS AND THEIR USERS

Chinese WoW modders worked in an environment vastly different from U.S. modders. The Chinese modders had been developing and distributing mods without Blizzard’s knowledge or support. In the Chinese context, the contradiction we examined shifted to a different part of the ecology (Figure 1) between modders and mod users. The contradiction centered on the availability of mods and the motivations for producing mods.

In the United States, mod users often provide feedback to mod authors. While of course some negative feedback is generated, a good mod garners considerable praise and attention. Mod authors find such positive commentary, along with high download counts, very satisfying.³⁹ The comments may be posted to a variety of forums and blogs as well as at the download sites. But our Chinese informants told us that Chinese WoW mod users rarely appreciated the Chinese modders for their work, failing to comment even on mods they used all the time and liked a great deal.

In downtown Shanghai on Valentine’s Day in 2009, the first author of this Article enjoyed a meal with two Chinese modders in a Korean barbeque restaurant. Both of them, Kurax and Yueselangying, were among the earliest members of the Chinese WoW Developer Group, and were now highly ranked

39. Kow & Nardi, *supra* note 2, at 21–29.

management members. When we explained to Kurax that we were looking to interview Chinese modders, he deadpanned, “There are no modders in China. If you have questions about modding you can ask me.”

This sarcastic comment was pursuant to Kurax’s own experience as a modder. On the first day that he participated in the Chinese WoW modding community, he was unpleasantly surprised by the lack of technical expertise and enthusiasm in the CWDG chatroom. He was seeking help with modding, but he found that he was already much more proficient than most of the modders in the community.

Why did Kurax remark so cuttingly on his fellow modders? Let us consider some historical background to answer this question. According to the renowned Chinese anthropologist Xiaotong Fei, Chinese grassroots practices are incompatible with the demands of modern life, which emphasize individuality and dealing with members of the general public: “In the process of shifting from a rural community to a modern community, [the Chinese] lifestyle cultivated in rural communities is disadvantaged in almost every [modern] circumstance.”⁴⁰

For example, a feature of the Chinese rural foundation is a preference for working in a familiar environment with familiar people and social rules.⁴¹ While such a preference can breed strong teams, the side effect is a general indifference toward strangers and lack of appreciation for the public good.

Once you mention something as belonging to the public, it is almost like saying that everyone can take advantage of it. Thus, one can have rights without obligations . . . we can see dirt piled in the public corridors and weeds growing in the backyard. No one wants to clean or to weed. . . . Whoever finds the condition of the [backyard] intolerable has to clean it up without pay or even without thanks. It is like Gresham’s law. Just as “bad money drives out the good,” selfishness drives out social consciousness.⁴²

Fei believes that the Chinese affinity for the familiar and indifference toward the unfamiliar are influenced by China’s rural conditions.⁴³ In 1985, seventy-six percent of China’s population lived in rural areas. The rural proportion slowly decreased to fifty-six percent in 2006.⁴⁴ This is still a very large rural population compared to twenty percent in the United States.⁴⁵

40. FEI XIAOTONG (费孝通), XIANGTU ZHONGGUO (乡土中国) [FROM THE SOIL] 11 (Shanghai Renmin Chubanshe, 2d ed. 2007) (1947).

41. FEI XIAOTONG, FROM THE SOIL 41–44 (Gary G. Hamilton & Wang Zheng trans., Univ. of Cal. Press 1992) (1947).

42. *Id.* at 60–61.

43. *Id.* at 41–44.

44. Ken Davies, *China’s Population, 1969–2006*, CHINABILITY, <http://www.chinability.com/Population.htm> (last visited Jan. 7, 2011).

45. OFFICE OF PLANNING, ENV’T & REALTY, U.S. DEP’T OF TRANSP., CENSUS 2000 POPULATION STATISTICS: U.S. POPULATION LIVING IN URBAN VS. RURAL AREAS, http://www.fhwa.dot.gov/planning/census_issues/metropolitan_planning/cps2k.cfm (last updated May 5, 2011).

Kurax observed that many CWDG members were just having random fun and were not contributing technical creativity to the modding community. On the Chinese Internet, a practice known as pouring water, or *guanshui*, refers to making meaningless, irrelevant remarks in online chatrooms or forums. *Guanshui* is an amusing aspect of participating in Chinese sites but adds no meaningful content. *Guanshui* was pervasively seen in the CWDG chat room, and was considered disruptive by contributing members.

With familiar teammates, Chinese modders exhibited an extraordinary sense of trust and a high level of efficiency in cooperative work. Johnny_16 was a central member of CWDG. We interviewed him at a house used as an office for his software development company. We asked for permission to take photos. “Go ahead. We are not like Americans,” he joked, referring to the Chinese lack of concern for maintaining individual private spaces. Johnny_16 used the house with his business partner and fellow modder Jingzhongzhao. Johnny_16 and Jingzhongzhao were willing to share to an extraordinary degree. In that three-story house, the two worked in the same room, at the same table, with their computers right next to each other. We can only imagine the degree of work integration and informational exchange such a work configuration would allow.

However, outside this circle of trust, Chinese modders found social interactions less worthy of their technical commitment. After Johnny_16 shared his famous Wowlauncher mod in Chinese forums and download sites, he received no grateful comments. Some users asked obvious questions that were already answered in the FAQ. “They don’t want to think or read. They just want to take from you,” noted Yueselangying. Most Chinese WoW mod users cared only about getting their hands on the mods and rarely considered who had created them. Kurax commented, “It is unlike in the U.S., where when you share, you become famous, and perhaps get employed in good companies.” Some of the Chinese mod users we interviewed were not even aware that modding communities existed in WoW.

Part of the reason for Chinese mod users’ lack of interaction with mod authors derives from the technical arrangements by which mods are distributed in China. Rather than downloading individually selected mods into the WoW Add-Ons folder as in the United States, most Chinese WoW players used one of the two major compilations—BigFoot or WoWSHell. A compilation is an executable programming file that automatically installs all the mods it contains into the Add-Ons folder. In our interview, Yueselangying estimated that these two compilations captured about ninety percent of the WoW modding market in China. A compilation contains seventy to eighty mods. Typical American players install many fewer mods, individually and selectively. Because American players pick and choose individual mods, they generally have the sense of a mod having been written by an actual player. The compilations impersonally present batched-up mods, breaking a link to individual authors. As commercial

companies, BigFoot and WoWShell inadvertently obscure the fact that it is modders—ordinary players—who program the mods. Players see only the compilations and recognize them as issuing from a commercial entity.

An environment where users are not appreciative of public assets like mods gives modders many reasons for nonparticipation. Kurax and Johnny_16 stopped sharing their mods. Other Chinese modders, like Yueselangying, shared sparingly. In the United States, many modders shared their mods because of the satisfaction they derived from watching download counts, reading positive comments left in online forums, and receiving donations. Users who downloaded mods also engaged the modders in forums. Users and modders collectively discussed programming bugs and future features. However, to modders like Kurax, Johnny_16, and Yueselangying, who had found no social recognition in sharing mods, modding was a personal hobby that had nothing to do with the public good of other players. These modders shared their work with their most trusted friends but wanted little to do with the rest.

In the Chinese digital media environment, the commercial companies producing compilations mediated the linkages between users and the modding community. These commercial teams resolved the contradiction between the Chinese users and Chinese modders with respect to distribution by playing a role that Chinese modders had little incentive to play. BigFoot and WoWShell obtained publicly available mods from download sites and merged them into user-friendly executable applications, simplifying mod installation and usage. Compilation mods may be more appropriate for the Chinese video gaming environment, where many Chinese players play in public Internet cafés and need to install mods anew at the beginning of each gaming session. However, the Chinese modders also told us that the workaround was to e-mail the mods to themselves. At the beginning of every session, they simply downloaded mods from their e-mail accounts and installed them in the appropriate folder. Therefore, while the popularity among Chinese WoW players of playing in Internet cafés may drive the demand for easy-to-install mods, the workaround suggests that technical ignorance of Chinese WoW players plays a role. In fact, the two factors may be coupled in that the easy-to-install mods do not give the players incentive to explore better options, thus keeping the technical level of the players low compared to that of the U.S. WoW players.

The mediation by commercial modding teams made mods available to users. But the arrangement solved only the users' half of the contradiction. The other half—the lack of social rewards and motivation for technical modding in China—remained largely unresolved. Our measure of modding creativity (i.e., the production of original mods) showed that American modders outproduced Chinese modders five to one.⁴⁶ Fei's work on the general non-obligatory attitude

46. Kow & Nardi, *supra* note 2, at 24.

of Chinese toward public goods suggests that the lack of incentives for user-creators of digital media may be common across China's digital landscape. Finding a way to motivate Chinese modders and other digital media developers is pertinent if more robust modding participation and a high level of user creativity in digital media are to emerge in China.

DISCUSSION

In the digital media environment where social contradiction is at play, mediating links can provide alternative concepts for resolving disagreements. Conflicts, such as between the U.S. WoW modders and the game developer Blizzard over new add-on policies, arise over the issue of ownership. To end such conflicts, proposals such as the *Declaration of the Independence of Cyberspace* have asked institutions to refrain from meddling in Internet development. However, both end user creativity and institutional efforts are relevant to the success of the Internet. When the search for a solution is based on an immediate and narrowly conceived premise of who is right and who is wrong, it is difficult to identify a win-win solution. A mediating link suggests that a relative solution is possible by providing alternate courses of action (such as the Curse Author Rewards Program) so that the disagreement can be resolved to the benefit of the conflicting ecologies.

We can say that a contradiction is resolved, but not eliminated, by the use of mediating links. A mediating link need not, and probably will not, completely resolve a contradiction. In the Chinese modding communities, introducing commercial teams as new social actors allowed the Chinese players to enjoy mods more easily. However, this mediating link did not encourage players to participate in mod creation. Therefore, multiple mediating links may be needed to sufficiently resolve the contradiction.

Mediating links may work together in a concerted effort to progressively resolve contradictions. For example, the World Wide Web has evolved based on many different, but linked, technologies.⁴⁷ Before the World Wide Web was developed, personal computers (PCs) emerged to enable people to process information better. Tim Berners-Lee, realizing that linked PCs are better than isolated ones, wrote the program Enquire to connect PCs in a network.⁴⁸ Markup languages like HyperCard were later developed to enable PC users to share documents with one another.⁴⁹ With these technologies, Berners-Lee was ready to propose the idea of a World Wide Web. Mediating links are like these tools, which build on one another to incrementally resolve contradictions.⁵⁰

A mediating link will integrate with existing social practices and transform

47. ILKKA TUOMI, NETWORKS OF INNOVATION 36–53 (2002).

48. *Id.*

49. *Id.*

50. *Id.*

them.⁵¹ For example, commercial companies in China paid modders to mod. The modders otherwise would find little reward in modding for free. BigFoot and WoWShell became so integral to the Chinese WoW gaming scene that their compilations were available at the Chinese official WoW sites (The9 and then Netease, third party companies that distributed WoW in China).

A mediating link in a community will not only transform the social group, but its effects will persist as the transformation also affects how members of the social group reason about social meanings:

Psychology must necessarily proceed from the fact that between the individual consciousness and objective reality there exists the “mediating link” of the historically formed culture, which acts as the prerequisite and condition of individual mental activity. This comprises the economic and legal forms of human relationships, the forms of everyday life and forms of language, and so on. For the individual’s mental activity (consciousness and will of the individual) this culture appears immediately as a “system of meanings,” which have been “reified” and confront him quite objectively as “non-psychological,” extra-psychological reality.⁵²

Ilyenkov is suggesting that once a mediating link is accepted as part of social practice, it will become the new “reality” to the group members. For example, seeking donations in-game was the “reality” to U.S. modders. In other words, it became the social norm: group members began to reason about possible courses of action with this social norm as an anchor point (before a new reality forced change).

The general social contradiction of China—the population’s lack of an ethos of public obligation—is currently being studied by Chinese sociologists and anthropologists.⁵³ As China’s vast rural population of over 500 million people experiences urbanization, it brings with it social practices largely unsuitable for cooperating with strangers. For example, we have seen in the Chinese modding community how Chinese mod users are unappreciative of and uninterested in modding work. According to Bingzhong Gao and Ruijun Yuan, both social scientists at Peking University, Chinese must learn the basic courtesies of dealing with strangers in order for China to emerge as a “civil society.”⁵⁴ Although civil society does not consist only of courtesies, such courtesies are the basic requirements for civic cooperation and cooperation between strangers for the common good. As also suggested by Fei, in the past, the Chinese built up the habit of being courteous primarily to those with whom they were familiar. Fei

51. ILYENKOV, *supra* note 5, at 251–54.

52. ILYENKOV, *supra* note 5, at 95.

53. See, e.g., GAO BINGZHONG (高丙中) & YUAN RUIJUN (袁瑞军), ZHONGGUO GONGMIN SHEHUI FAZHAN LAMPI SHU (中国公民社会发展蓝皮书) [BLUE BOOK ON CIVIL SOCIETY DEVELOPMENT IN CHINA] (2008).

54. *Id.* at 3.

argues that such inconsideration has now become a hindrance for the emergence of civic groups in China.⁵⁵

To conclude, we provide some hypothetical examples, and some predictions, of mediating links that might be useful to the digital media environment.

If modding can be developed into a new industry—that is, significantly more modders are able to make a living through modding—lawyers may find it rewarding to engage in defending the rights of content creators, giving modders greater scope for innovative activities. For instance, Burk has argued that copyright law as applied to virtual world artifacts like mods is ambiguous:

Any of the legal claims reviewed here depends upon user authorization, but that status is in turn reliant upon the license by which the user accesses the platform, including both an explicit [Terms of Service agreement] and implicit norms and courses of conduct between user and proprietor. As a consequence, asserting the types of claims reviewed here for purposes of governance will inevitably result in messy post hoc determinations as to the limits of authorization.⁵⁶

For laws that are ambiguous, user content creators may gain ground by developing a lucrative field for legal professionals to more clearly define their intellectual claims. Following this argument, the deciding factor regarding the emergence of a level playing field may be whether content creators can develop a lucrative market. Thus, rather than engage in messy legal wrangles, developers may consider helping user-creators turn contents into profits, particularly where intellectual ownership is indeterminate, in order to truly protect the rights of the content creators.

We have argued that user-created contents such as mods have value to both users and corporate developers. Within the user community's perspective, Ito has argued that this value is expressed as a form of reputation.⁵⁷ From the company's perspective, this value is a function of an equation with maximizing profit as the outcome.⁵⁸ If both values may be aligned, by means of equating reputation (e.g., download counts or popularity scores) to an equivalent monetary value, then perhaps the user and corporate communities can make better decisions when negotiating issues like ownership. Speaking plainly, perhaps modders will be happy to forgo certain rights to ownership if they are compensated appropriately.

If so, user-developers may find solace in emerging programs similar to the Curse Authors Reward Program. Flattr, launched in March 2010, is one such program. Flattr.com allows digital content owners to collect micropayments as a

55. FEI, *supra* note 41, at 60–65.

56. Burk, *supra* note 3.

57. Mizuko Ito, Closing Keynote Address at the 2010 Association for Computing Machinery Conference on Computer Supported Cooperative Work: Amateur Media Production in a Networked Ecology (Feb. 10, 2010).

58. Kow & Nardi, *supra* note 3.

form of donation by placing a Flattr button on their website. For example, a donor donates a monthly sum to Flattr. As the donor surfs the web, he clicks on Flattr buttons next to content that he likes. Every month, Flattr will divide the donations according to the number of clicks he made. The more clicks a content author receives, the larger a portion of the donations she will get. It is intriguing to query whether such programs, in their mature form, will evolve into a monetary economy that supports user production of digital media.

As the predicament of the Chinese modding community suggests, user producers are also motivated by kind words of appreciation and encouragement. As we pay attention to media literacy,⁵⁹ we may consider popularizing the notion that rewarding others for developing good content is a prosocial skill that helps enrich the digital commons. Such literacy, if it becomes pervasive, may well resolve digital media contradictions such as those the Chinese modders face.

CONCLUSION

At the edges of activity systems are contradictions constituted as “growth buds,” where development is possible if systemic discrepancies are properly resolved.⁶⁰ To find opportunities for growth in contradiction, dialectical logic suggests that we look beyond the immediate problem when resolving contradictions. A scene in the movie *Patch Adams*⁶¹ provides an analogy. Patch, a medical student, is surrounded by professors and doctors who essentialize patients as synonymous with their illnesses. Their solution, in dealing with sick patients, is medical treatment, which usually reduces to nothing more than prescribing medication. With such tunnel vision, the professors and doctors neglect patients’ emotional needs. One day, Patch meets Arthur Mendelson, a patient with a mental disorder but also a very intelligent man. Arthur repeatedly asks Patch the same question, with four of his fingers sticking out, “How many fingers do you see?”⁶²

While everyone else ignores Arthur, Patch pays attention. Arthur interrogates Patch again, “Y-You’re focusing on the problem. If you focus on the problem, you can’t see the solution. Never focus on the problem. Look at me! How many do you see?”⁶³

To the doctors, the illness is the problem. But, seeing beyond the *problem*, Patch perceives that doctors could help many patients by improving their quality of life through the generosity of personal attention, a better environment in which

59. See generally HENRY JENKINS ET AL., CONFRONTING THE CHALLENGES OF PARTICIPATORY CULTURE (2009).

60. Foot & Groleau, *supra* note 6.

61. PATCH ADAMS (Universal Pictures 1998).

62. *Id.*

63. *Id.*

to recover from their illnesses, and instruction in how to lead a healthier life. Finally, Patch replies, "Eight."⁶⁴

Arthur responds, "Eight. Eight. Yes! Yes! Eight's a good answer. Yes."⁶⁵

Most people, restricted by conventional logic, would have answered four. Patch gave a different answer. It did not matter if eight was the correct answer. Patch saw beyond convention, and found an unconventional solution that worked for his patients.

64. *Id.*

65. *Id.*