Commons / Commodity:

Peer Production Caught in the Web of the Commercial Market

Bingchun Meng (LSE)

Fei (Philip) Wu (Surrey)

Abstract

The development of digital technology and computer networks has enabled many kinds of online collaboration. This article examines *Zimuzu*, a Chinese case of online peer production that produces and distributes online Chinese subtitles of foreign media content. *Zimuzu* provides an opportunity to extend our understanding of how the tensions between the commodity and commons production models are being articulated in an online setting. Using empirical evidence collected from face-to-face interviews, online posts and online ethnographic observation, our analysis demonstrates that there is constant negotiation over which aspects of the two seemingly opposing models will be adopted by the community. We argue that it is important to conceptualize the peer production process as being influenced by power relations within and between the translation groups as well as between the groups and other commercial organizations.

Introduction

The development of digital technology and computer networks has enabled many kinds of online collaboration. It is now possible to coordinate the intelligence and labor of huge numbers of people by connecting them in ways that support their achievement of common goals. Wikipedia, for instance, uses a simple Web-based technology and a range of organizational mechanisms to motivate people to create the largest encyclopedia in human history. Wikipedia and other Free and Open Source Software (FOSS) applications are examples of online peer production or what Benkler (2002) calls commons-based peer production. Unlike conventional proprietary software produced by firms, commons-based peer production of software starts with self-organizing individuals who collaborate to create software that is not only freely available, but also permits its users to revise the source code to make further improvements. These activities are creating new opportunities for wider participation in content creation, and challenging proprietary market-based models of information production.

Commons-based peer production is often seen as the antithesis of commodity production and is widely associated with the potential of digital networks to enable collective intelligence (Levy, 1997), to create a participatory culture (Jenkins, 2008), and to foster moral and political virtues (Benkler & Nissenbaum, 2006). In Marxist terms, commodity production in a capitalism society is organized by those who own the means of production and performed by workers who sell their labor in exchange for wage while being subjected to exploitation. The commodities that are sold on the market therefore epitomize the social relationship between capital, capitalists and wage labor (Marx, 1976, pp. 953-955). In the commons-based peer production model the arrangements for motivating, organizing and governing contributors'

2

activities are understood to differ from the arrangements for commodity production. These developments are frequently counterposed to the values of firm-based market competition in a commodity culture.

However, there are many suggestions in the literature that these two models overlap to some extent and that there are ways of dealing with the conflicts that emerge between them (Berdou, 2010; Kittur & Kraut, 2010; Langlois & Elmer, 2009; Shah, 2006; Weber, 2004). Building on the insights from this stream of research, examination of a Chinese case of online peer production (*Zimuzu*, or Subtitle Groups, an online community consisting of many groups that produce and distribute subtitled translations for foreign films and television productions), provides an opportunity to extend our understanding of how the tensions between the commodity and commons production models are being articulated in an online setting. The case demonstrates a complex relationship between *Zimuzu's* peer production activities and the commercial pressures of the market, yielding insights into the power relationships at play. Although there are those who are either critical (e.g., Fuchs, 2009; Terranova, 2000) or celebratory of (e.g., Jenkins, 2008; Surowiecki, 2004; Tapscott & Williams, 2006) the commons-based peer production model, the analysis of the *Zimuzu* case shows how this model interacts with and, therefore, both challenges and reinforces the commodity model of digital content and information production, and is becoming a signpost indicating the direction of future research. In the next section, we discuss different views of the operation and significance of peer production, followed by a brief account of the development of *Zimuzu* within the specific media environment of China. The empirical evidence is organized around three major themes, each reflecting the tensions between peer production and commodity production in interesting ways.

Peer production: Hopes and doubts

Yochai Benkler's (2006) *Wealth of Networks* is among the comprehensive

scholarly treatments of the commons-based peer production model. Benkler explains

the technological affordances and organizational conditions in the networked

information economy that have enabled this new mode of production. He claims that

'the diversity of ways of organizing information production and use opens a range of

possibilities for pursuing core political values of liberal societies—individual

freedom, a more genuinely participatory political system, a critical culture, and

social justice' (Benkler 2006, p.8). The political significance of peer production is

located in two main features which differentiate it from firm-based commodity

production (Benkler, 2003, 2004; 2006). First, in contrast to firm-based production,

resources and tasks in peer production are allocated through decentralized decision-

making rather than a hierarchical governance structure. Benkler argues that,

compared to action within hierarchical organizations, individuals enjoy autonomy in

peer production which is seen as a manifestation of the values of freedom and

equality. Second, as in the case of FOSS, peer production is commons-based insofar

as it creates resources that are held in common or collectively by a community that

permits sharing of the resources created, among its members and often beyond the

community.

Many other scholars are similarly optimistic about the empowering potentials

of peer production. Kelty (2008) conceives FOSS participants as a 'recursive public'

engaged in building and maintaining an infrastructure that allows them to come into

being which, in turn, constitutes them as autonomous and creative individuals.

Coleman (2009), using the Debian community as an example, demonstrates how

FOSS developers become involved in exploring and contesting the meaning of freedom by tinkering with technology and the law, in ways that challenge proprietary ownership of software, collectively developing new legal constructs that diverge from the prevailing interpretation of intellectual property law. Wikipedia is another much celebrated online community whose collaborative production model promotes a sharing culture (Lih, 2009; Reagle, 2010). Wikipedia entries are open texts that allow constant revision and negotiation. This arguably creates the conditions for the more participatory culture envisaged by Jenkins (2008) and others, in which consumers are involved in online practices of the peer production of culture, which promotes cultural diversity and serves as a corrective to the traditionally dominant power of the media (Jenkins, 2008; Uricchio, 2004).

Notwithstanding the apparent virtues of inclusivity and equality that seem to characterize commons-based peer production, there is disagreement about how and to what extent it interacts with commodity production. There are increasing numbers of instances where commons-based peer production is being integrated into business practices in ways that appear to reinforce rather than challenge the commodity model of information production. For example, Langlois and Elmer (2009, p. 774) suggest that the incorporation of Wikipedia entries within commercial online products indicates that this peer production models cannot 'escape the proprietary imperatives embedded in the Web's network architecture'. The fluid and apparently symbiotic relationship between commons and commodity production is manifest also in digital games where the games industry benefits from the hackers' technological innovations by incorporating hackers' modifications to games into its new releases of games (S. Coleman & Dyer-Witheford, 2007). Some argue that an emphasis on the participatory nature of information production is welcomed by commercial media

companies that seek the means to integrate consumers into their production processes (Berry, 2008; Fuchs, 2009; Kreiss, Finn, & Turner, 2011; Terranova, 2000; van Dijck & Nieborg, 2009).

It is also acknowledged in the literature that online peer production communities are not always egalitarian or inclusive. Conflicts and hierarchies are rife within these communities as elsewhere, illustrating the dynamics of power relationships within peer production communities. In these communities, power is often understood to operate as a generative rather than a repressive force, that sustains peer production at both the organizational and discursive levels (Berdou, 2010; Bergquist & Ljungberg, 2001; Weber, 2004). Generative power is articulated through participation in peer production, which involves a gradual process of learning and a socialization that operates within the hierarchies in the relationships between newcomers and veterans, peripheral participants and core members, and average contributors and decision makers (Berdou, 2010). To facilitate cooperation and to resolve conflicts, peer production activities may be organized through a combination of formal authority and decentralized self-governance with the help of sanctioning mechanisms, resulting in hybrid production models (Forte, Larco, & Bruckman, 2009; O'Mahony, 2007; Weber, 2004). In fact, some scholars question whether it is possible at all to achieve inclusivity and accountability of participants without some form of institutionalized rule-making procedures (Kreiss, et al., 2011).

There is evidence, therefore, of a symbiotic relationship between the two models of production, which raises interesting questions for further exploration in the case of *Zimuzu*. The design and methodology employed in this case study enables us to examine some of the features of the apparent hybridity of the models and to reveal the extent to which the commons-based peer production model operates in an

6

autonomous way distinct from the commodity production model. The empirical evidence was collected from face-to-face interviews, analysis of posts on *Zimuzu* Web forums, and online ethnographic observation. During a three week period of fieldwork in China in 2009, 12 in-depth interviews were conducted in Beijing and Shanghai with members and former members of the *Zimuzu* community. More than 400 postings were sampled and archived from four major *Zimuzu* Web forums where members discuss translation projects and reflect on their relationships with the group. The interview transcripts and postings were analysed using thematic analysis of the texts, and triangulated with data from ethnographic observation to develop a more contextualized understanding of the community. Reading and re-reading of the texts identified a set of key concepts, which were categorized, merged and integrated as coherent themes. The interviews are critical for understanding not only the operation of *Zimuzu*, but also participants' perceptions of the culture and norms of the *Zimuzu* community. Kelty (2008, p. 29) argues that the geeks 'use technology as a kind of argument, for a specific kind of order', and the ways that members explain their involvement with *Zimuzu* also provide a glimpse of the order that they imagine in digital networks. This imagination is constructed, consciously or unconsciously, at two different levels: how participants perceive their relationship with digital content, and how they relate to fellow group members. The online posts serve to correct the potential bias in self-reported data and add nuance to the tensions and conflicts not always articulated by interviewees. The online ethnographic observation provides rich information about similarities and differences in the images that each group projects to the fans, the rhythm and flow of the groups' daily activities and the different dynamics in different sections of *Zimuzu*'s group forums.

In the following sections, we first offer a brief account of the significance of Zimuzu within the media environment in China. Then the three main themes that emerged from the analysis of the empirical data collected for the *Zimuzu* case are discussed in turn. The three themes concern: 1) the motivations of participants; 2) the features of intra-group organization; and 3) the characteristics of inter-group competition. Particular attention is paid to how the commons/commodity duality of information products is articulated through the practices and discourses of *Zimuzu* participants.

Zimuzu and the underground flow of media content

Broadband services grew rapidly in urban areas of China in the late 1990s. Among urban Internet users, peer-to-peer (P2P) file sharing has provided a means of delivering foreign language content to Chinese audiences, filling a gap in demand that official Chinese media outlets have failed to respond to. A unique online community, known as *Zimuzu* (meaning subtitle groups), emerged in 2001; it relies mainly on P2P file sharing. *Zimuzu* members are volunteers who translate and release Chinese subtitles for foreign language media content. At the time of writing there were four major groups that enjoyed high visibility and good reputation among Chinese netizens: YDY, YYeTS, TLF and 1000FR.[1] These groups boast expertise in a number of languages, including English, Japanese, French, Italian and German, and the content they provide translations for ranges from American television dramas and reality shows, to Japanese animations and BBC documentaries. Each group has between 100 and 300 members. The translation projects are coordinated online via instant messenger services such as QQ[2] and MSN. The completed subtitle translations are released via the groups' online forums and blogs. The time lapse

between a show's world premiere and the availability of its subtitled version on the Chinese Internet, for the most popular content, may be as short as six hours.

For millions of Chinese people seeking foreign programming, their media consumption depends on the volunteer work of *Zimuzu* since Chinese subtitled content is usually not provided by the traditional official media outlets, which import only a very limited number of foreign films and TV programmes. The demand for foreign content, such as Hollywood movies, was previously satisfied by copyright-infringing Video Compact Disks (VCDs) and Digital Video Disks (DVDs), but this content can now be delivered via digital networks which allows fans to watch their favourite shows on the same day that it is delivered to their American counterparts. The producers of infringing or pirated DVDs have also been ripping translated subtitles from *Zimuzu* websites without compensating volunteer translators, a practice referred as grave-robbery by *Zimuzu* members.[3]

Compared to the high-profile commons-based peer production projects, such as Wikipedia, and Linux, a major FOSS project, *Zimuzu* activities appear to exist in a legal grey zone. Legally, the Berne Convention,[4] to which China is a signatory, stipulates that copyright holders have the exclusive rights to authorize translations of their work. However, legal uncertainty is created insofar as *Zimuzu* distributes the subtitles for free. The subtitles translated by volunteers do not substitute for legal products since they are not being produced in the Chinese 'paid for' market. Foreign media companies cannot claim that the *Zimuzu* practice leads to revenue losses because Chinese audiences would otherwise not have had access to the vast majority of this foreign programming in their own language. Furthermore, *Zimuzu* does not distribute the copyrighted media content directly; it can be downloaded from P2P file sharing sites such as *The Pirate Bay*. In the case of popular American television

dramas, the *Zimuzu* community relies on someone living abroad who records the closed caption of each episode and sends it to *Zimuzu* members as a text file. For media content that is not captioned, translators rely on their listening skills to create subtitles. In most cases, *Zimuzu* members distribute only the translated subtitles which P2P file sharers can merge with downloaded content which may be illegal or infringing content.

The *Zimuzu* case is a commons-based peer production community insofar as its members contribute voluntarily and distribute their work for free. These individuals form self-governing translation groups and they share a sense of belonging and identification with the community. What may set *Zimuzu* apart from other communities of this kind, however, is its dependence on commercial media products. Unlike FOSS products or Wikipedia contributions, *Zimuzu* does not produce original digital content. Instead it relies on popular digital commodities, such as American television shows and Hollywood movies, which are subject to copyright protection. This interdependence of a commons-based peer production and a commodity production model is likely to play a role in shaping the motivations of *Zimuzu* members, and in the organizational norms and values adhered to by the community. In the following we examine how *Zimuzu* operates, with attention to the practices of the members of the groups and how these intersect with those associated with commodity production.

Motivations for Participation

The first major theme that emerged from analysis of the data is the variety of motivations – including symbolic, material and virtual - that inform the practices of Zimuzu group members. Previous research shows that the motivations for voluntary contributions to commons-based peer production projects vary (See for example,

Batson, 1992; Kollock, 1998; Oreg & Nov, 2007; Shah, 2006; Torvalds, 1998; Weiner, 1992). It is argued that some people participate for the rewards related to creation, while others seek feedback and recognition from their creations; some are driven by their own information needs and desire to learn, while others strive to build their reputations, or the collective identity of their community (Weber, 2004). Our analysis of the interview and observational data collected for the *Zimuzu* case study suggests that participation in *Zimuzu* is motivated by a similar set of non-monetary incentives. However, *Zimuzu* participation illustrates, also, the reconciliation of conflicts between individual self-interest and the spirit of commons; between material and symbolic rewards; and between commercial incentives and non-market incentives for participation in peer-based information production.

When asked their reasons for joining a *Zimuzu* group, many interviewees referred first to personal interest and opportunities for learning. One interviewee said that:

I got hooked up by Stargate, you know, the sci-fi fantasy. I have always been a big fan of sci-fi—not many girls are like that. I only found the first two episodes of their television series translated, then I heard about this subtitle group called 1000FR. So I joined them, and my first task was to translate the rest of the episodes of Stargate. It can be quite challenging to translate sci-fi, I had to look up a lot of Physics terms. But I was totally thrilled, so much fun. I was an engineering major, so I guess I had that mindset. (Interview with DP, young professional, 22.Apr.2009)[5]

11

This extract suggests that participants are driven by personal interest, especially if initially this seems to depart from the mainstream interest, but ultimately resonates with the interests of a larger group as a communication network is established. In this sense, *Zimuzu* groups can be understood as constituting learning communities in which participants (mainly college students and young professionals) are motivated less by monetary returns than by the opportunity for learning. The rewards of participation appear twofold. One is the immediacy of the enjoyment for the *Zimuzu* participant of watching his or her favourite media content when it is translated, a motivation that resonates with the software developer's desire to scratch one's own itches (paraphrasing Weber 2004, p.137). Another is the long-term benefit of improved foreign language proficiency (especially in English), computer skills and media literacy.

Social-psychological motivations, such as the enjoyment of sharing, socializing with like-minded people, and identification with the ethos of *Zimuzu,* also play an important role in motivating participation in a group. A former member of 1000FR, recalling the time she joined *Zimuzu*, said she thought 'it was really cool' to work with a group of young friends in a virtual setting and share the products with more fans. She said it gave her 'a sense of pride and fulfilment' (Interview with PM, graduate student in legal studies, 20.Apr.2009). A veteran member of the YYeTS group described the chat room of this subtitle group as a social space where 'it's the place for me to hang out, not just to discuss translation work, but also to chat about the shows and other stuff, you know, gossiping, harassing new girls for photos and personal information' (interview with SS, newly graduated college student, 18.Apr.2009).

As digital technologies enable reductions in the costs of producing and distributing digital information and media content, the barriers that previously excluded many participants from producing such information are being lowered. This is encouraging online participation for perhaps non-monetary reasons, which is consistent with studies of FOSS communities. In the *Zimuzu* case, when participants encounter a conventional monetary incentive this is disruptive to the smooth operation of the commons-based peer production process of subtitles.

For example, when Shofa (a small *Zimuzu* group constituted mainly by former YYeTS group members) obtained venture capital investment, it decided to become the first subtitle group to pay its translators. However, the practice was short-lived; the leader of Shofa describes the disruptive outcome of this practice for the *Zimuzu* community:

> *We are not paying that much, I think about RMB 8 (note: about 1.2 US.Dollar) per hundred lines. But so many people suddenly wanted to join in. It still makes me laugh when I think about it because they had no clue how ZimuZu works.... Of course other groups are mad at us, the guy in charge of YYeTS at that time started to badmouth about us, saying we lured people away from his group with money. Eventually we had to stop paying when the money dried up, a lot of group members simply disappeared right away.(*Interview with YZ, former team leader of Shofa, young professional, 16.Apr. 2009)

This illustrates the negative impact of a monetary incentive on participation in peer production. The prospect of earning money from subtitle translation is described as

having 'overwritten' (Benkler, 2002) other motivations and attracting less committed and less competent participants. Many wanted to join the group simply to receive the payment and left it when payment was no longer forthcoming. The monetary incentive implemented in Shofa created a disturbance within the larger *Zimuzu* community where the values of sharing and voluntary work are privileged. Conflicts emerged when the prospect of monetary reward began to encourage participants to move from their *Zimuzu* groups.

Interestingly, although the members of the *Zimuzu* community appear to reject a commercial approach to peer production, the rewards that participants claim to receive as a result of their work are not entirely symbolic and psychological, since, as indicated above, they gain access to media content that is not widely available through mainstream outlets. *Zimuzu* builds on commercial media content which in China, as elsewhere, is distributed by underground warez groups.[6] The ephemeral nature of copyright infringing file sharing is such that only the newest and most popular content is easily obtainable. Content quickly becomes obsolete when the number of peers sharing the same file declines significantly over time and obtaining a complete digital copy becomes difficult or time-consuming. The insatiable demand for the latest content in China pushes *Zimuzu* members constantly to update the repertoire and the major *Zimuzu* groups have built sizeable collections of content that has been translated, stored on the group's File Transfer Protocol (FTP) computer servers. For avid consumers of foreign media content, the password to these FTP servers is the key to a treasure box of content. Newcomers to the community can earn access by performing well in their probationary period (see detailed discussion below), and existing members need to maintain the level of their contributions over time because server access passwords are changed regularly by administrators. This

motivational mechanism suggests the existence of a logic of material reward within the framework of a commons-based peer production model. This hybridity emerges more clearly when we examine the intra-group organization mechanisms in each *Zimuzu* group.

The study of motivation suggests that *Zimuzu* provides opportunities for participants to re-configure their relationships with digital content that resists both commodification and government regulation. *Zimuzu* members are not just consumers of commercial media products, nor are they passive audiences accepting a repertoire approved by Chinese regulators; they are motivated to carve out their individual spaces for learning, socializing, sharing and creating while engaging in subtitle productions. However, their spaces are contested rather than autonomous, as illustrated by the controlled access to the community's digital resource.

Intra-Group Organization

The second main theme that emerged from our analysis of *Zimuzu* centres around the question of what are the organizational mechanisms in *Zimuzu*'s collective peer production? With respect to the organization of the individual contributions, Benkler (2006) and others argue that commons-based peer production is organized in a non-hierarchical way that differs from market-based commercial production in which price mechanism and other features are normally associated with hierarchy. They tend to see decentralized decision making in commons-based peer production as indicative of a distributed power relationship in which participants have high levels of individual autonomy. However, studies of governance mechanisms in the Linux and Wikipedia communities paint a more complex organisational picture, suggesting that hybridity characterizes the cultural

norms and formal rules of these communities such that there is a benevolent dictatorship and the norms of meritocracy are present in these peer production projects (Berdou, 2010; Elliott, 2002; Forte, et al., 2009; Kittur & Kraut, 2010; Mockus, Fielding, & Herbsleb, 2002; Raymond, 1999; Shah, 2006; Weber, 2004). The intra-group organizational features of *Zimuzu* groups are indicative of this account of hybridity, but the analysis of the *Zimuzu* community reveals unique aspects that set it apart from other cases of peer production.

While the organization of the Linux community is primarily influenced by the 'technical rationality' of producing modular and flexible software codes (Weber, 2004), modularity and flexibility of the work are already inherent characteristics of *Zimuzu*'s production. Compared to software products, a subtitle document is easily divided into segments, and the progress or the quality of translation of one segment does not impact on those of the other segments. The divergence of individual's translation style is ameliorated through both the probation system, which helps newcomers build common understanding of the genres that *Zimuzu* works on, and through the final editing by senior members, who try to maintain consistency across segments translated by different individuals. The modularity not only affords a great deal of flexibility in the division of labour, it also increases the autonomy of individual participants. In theory, a translation project can be assigned to as many translators as deemed necessary, and the coordination of work and the integration of translated segments are straightforward. The quality control at the integration stage can be minimal if there is time pressure to release the subtitles. In this sense, *Zimuzu* can operate within a rather flat organizational structure that affords very decentralized peer production. The peer production process in *Zimuzu* reflects the

simple rationale of efficient and fast-paced production in a highly distributed

network.

However, participation in the *Zimuzu* community does not start with, nor

does it end with translating. While the subtitle translation process is non-hierarchical

and highly distributed, explicit community rules and implicit norms regulating the

community's day-to-day activities suggest the presence of a hierarchical governance

structure. The most evident hierarchical feature in *Zimuzu* community is its new-

member probation system. Although anyone, at any time, can volunteer for a *Zimuzu*

group, they usually have to submit to a probationary period, during which a veteran

member monitors their level of commitment and assesses their translation skills.

YDY, a major *Zimuzu* groups, circulates a detailed 12-page *Handbook for*

Probationers, containing sections on basic knowledge, probationary procedures, use

of downloading software and media players, translation procedures and subtitle

formatting guidelines. The length of a probationary period varies depending on the

performance of the probationer. Some will come graduate from their probation after

completing a couple of projects; some will be forced to go through a longer learning

process; some may choose not to pursue membership of the group.

In this sense, *Zimuzu* groups resemble communities of practice where layered

control over access to the community differentiates core from peripheral members.

The authority of core members is established through close supervision and hands-on

training of 'newbies'. While the *Handbook* provides a starting point for learning, it is

through practice and engagement with other members in the community that a

peripheral member learns to participate as a member of the community. The

probation system is a reification of 'legitimate peripheral participation' (Lave &

Wenger, 1991) in which newcomers are granted the legitimacy of apprenticeship.

Over time, both core and peripheral members establish trajectories of participation which 'give meaning to their engagement in practice in terms of the identity they are developing' (Wenger, 1998, p. 155).

However, communities of practice are not 'an emancipatory force' (Wenger, 1998, p.85), since control of access and resistance to such control are always present in a hierarchical social system where the meaning of participation is constantly negotiated. Traces of conflicts and tensions are easily detected in *Zimuzu*.

The nature of translation work is such that once the subtitles are released, they become less open to alteration and improvement. *Zimuzu* limits the time period for peer review, and relies on a small number of senior members for quality checks before subtitles are released to the public. Although *Zimuzu* groups have discussion threads on web forums where non-members can comment on the quality of the translations, there are few signs of incremental, ubiquitous peer review that occurs in FOSS projects (Benkler, 2006; Weber, 2004).

The hierarchical governance process is also evident in the layered control over access to the community resources. The core members of each group serve as gatekeepers who grant and monitor access to the group's FTP servers. Certain sections on the groups' web forums, mainly those discussing important administrative issues, are password protected and are accessible only to veteran members who have attained high status in the group. In addition, each of the four major *Zimuzu* groups has implemented a virtual currency mechanism to manage access to the group's FTP server. The accumulation of virtual currency depends on the level of contribution to the translation projects and administrative tasks, the length of stay in the group and seniority. Some *Zimuzu* groups classify the content on their servers according to its popularity: the more popular, the more restricted the

access, and the more virtual currency that must be earned in order to access it. This virtual currency is not convertible into real money (unlike Second Life and other online gaming communities), although more virtual wealth usually leads to more privileged access and a higher social status in the community. When a member accumulates enough virtual currency, she gains access to the treasure box of digital content. Former freely available digital goods are enclosed, becoming a resource that is valued using a monetary mechanism. The mechanism mimics commercial discourse by linking access to and consumption of these digital goods with contributions to their production. Furthermore, the amount of virtual currency possessed by a member is visible to the rest of the group and is a prominent symbol of status within the community. This indicates the pervasiveness of a commodity logic in two senses. First, just like a 'real' money system, virtual currency is utilized as an effective means to manage access to scarce digital goods. Second, partly because the supply of digital goods, in this case foreign media content, has not changed completely from scarcity to abundance, the accumulation of virtual currency becomes an important motivation and carries similar symbolic meaning to material wealth.

While the virtual currency mechanism may appear similar to a meritocracy system, the merit being rewarded within the community is not the quality of production, but rather accumulated seniority through the trajectories of participation in various community activities. The most privileged members of the community are not necessarily masters of translation, but are individuals who have stayed active in the community for long enough to become widely recognized by other members. When seniority rather than meritocracy sustains a hierarchical social system, conflicts between core and peripheral members of the community are inevitable. An

incident in the 1000FR group is indicative of the power struggles in the *Zimuzu* community. The conflict was sparked by a rather trivial incident of a peripheral member making a joke about two veteran IDs, on the group's internal network radio. This was perceived as a lack of respect toward those regarded as being the most important contributors and prompted harsh criticism from long-standing group members, and comments that what really mattered to the 1000FR group was the committed translators, not the work of those who made less important contributions. The exchanges escalated into a flame war between the group's core and peripheral members, and more than a dozen veteran members left 1000FR to start a new subtitle group called Ragbear. The dispute in this incident centred around which members of the group were indispensable to the peer production team, and deserving of greater respect and more privileges. Those that decided to leave the 1000FR group appeared infuriated by FLX, the founder of 1000FR, who decided to protect peripheral members by excluding and silencing several veteran members of the group: 'Has FLX got water in her head? Favouring those no-good slackers over committed members of the translation team? She gone nuts? ... I really don't know what 1000FR is about then!'(posting on www. 1000fr.net).

Overall, although peer production has tended to be associated with an ethos of non-discriminatory participation, the *Zimuzu* case suggests a more complex picture of intra-group organization. The analysis suggests that *Zimuzu* is not an egalitarian community in which all participants enjoy the equal social and economic status. Veteran members possess more virtual wealth and power than newcomers and conflicts occur if this power structure is challenged. This hierarchically centralized feature of these groups' governance resembles the organizational structure of

commercial firms where key decisions are made by a small group of elites and the distribution of resources is heavily influenced by the competitive marketplace.

Inter-Group Competition

The third and final theme emerging from the analysis focuses on issues relating to inter-group competition and the way that the commodity production system influences the choices available to the specific form of *Zimuzu* peer production. Christian Fuchs uses the antagonism between cooperation and competition to characterize the Internet economy. He argues that although open source communities and P2P networks advance the principles of 'open access, free distribution, cooperative production, and common ownership of goods' (2008, p. 164), the cooperative model is often subsumed under the logic of capital accumulation which is oriented to competition and commodification. This antagonism is highly visible in the operation of *Zimuzu*, although the outcome is pending.

Unlike FOSS communities in which programmers are clustered around a project, *Zimuzu* participants first are identified with a specific translation group before engaging in subtitle production. The translation projects of major *Zimuzu* groups often overlap as groups elect to work on the same popular media content such as the latest Hollywood blockbuster. As a result, groups in the *Zimuzu* community compete with each other to release high quality subtitles in response to audience demand. This inter-group competition appears to reinforce group identity and loyalty and serves to enhance different groups' brand images through recognition from Chinese consumers of their subtitled content.

The interviewees in our sample frequently made comparisons between their group and competing groups. An example of the fierce inter-group competition that occurs was evident in the claims that each major group had wanted to be the first to release the subtitles for *Prison Break*, an American television drama that was very popular in China. Sometimes the first release by one group would come only a couple of hours before another group's release. One veteran *Zimuzu* member observed that the YDY and YYeTS groups had 'established their names among the mass audience' (Interview with AD, young professional, 24.Apr.2009) by winning the competitions for timely releases.

Interviewees also made comparisons between the specialty and style of translation of different groups. For example, the TLF group specializes in translating movies and was said to be 'loyal to the original text' while the YYeTS group 'sometimes try too hard to make their subtitles sound like colloquial Chinese' (Interview with XN, young professional, 23.Apr.2009). Similarly, among American television show genres, the 1000FR group is known for its translation of medical shows such as *House* and *Grey's Anatomy*, the YDY group is associated with crime series such as *CSI*, and the YYeTS groups is noted for its translations of Sci-Fi and historical dramas.

Competition and group specialization seem to be associated with more than a race for honour and recognition because establishing a brand image is important for some major *Zimuzu* groups to attract advertising to their Web forums and to establish a presence that enables cooperation with commercial content sites. As indicated earlier, *Zimuzu* maintains a large digital archive of the content for which subtitles have been produced. Each group needs a steady source of financial support to pay for the costs of renting and maintaining the servers. In the early start-up stage,

Zimuzu groups rely on the personal contributions of founding members and small donations from participants, to sustain their translation operations. As Web traffic grows and the number of files hosted on the servers increases, advertising becomes an option for some *Zimuzu* to generate the income they need. Liangliang, one of the founding members of the YYeTS group, said in interview that 'Ever since my buddies got married one after another, they couldn't sneak out any more as money is under the watchful eyes of their wives. So I had to find some other ways to cover the cost' (personal interview, 24.Apr.2009). Now a visitor to both YYeTS and 1000FR forums encounters commercial banners or pop-up ads. Since active users of the forums tend to be avid fans, *Zimuzu*'s websites are attractive to online stores selling content-related merchandise such as key chains, T-shirts, or mugs adorned with images from popular shows. The YYeTS group also offers its VIP members a discount at affiliated retailers on MP3 players, flash drives and hard drives.

In the same way that Shofa's payments to translators caused huge disturbance within the *Zimuzu* community, YYeTS's active collaboration with commercial companies has become a focus of contention. Some groups, such as YDY and TFL, maintain a strong position against commercialization even if the profit eventually is used to sustain subtitle production. Observations show that the YDY and TFL members felt a pride in their resistance to commercial market pressures and consider any commercialization practice to be unacceptable. The operations of these groups still rely solely on the financial support of their founding members and small donations from individuals. Their attitude towards YYeTS is unequivocally critical. They accuse the group of rushing to release low-quality subtitles for popular shows in order to 'steal' attention. YYeTS's aggressive online advertising has angered many *Zimuzu* members who feel overshadowed by an unethical competitor: 'people

think that YYeTS is synonymous with *Zimuzu*!' (personal interview, 25.Apr.2009).

Contrasting this with the social norms in fan fiction communities (Fiesler, 2007; Jenkins, 2007), which also rely on copyrighted content and exist in a legal grey zone, the judgement of acceptable practice for *Zimuzu* seems to be more group-based than universally accepted by the whole community. In the fan community, attempts to profit from fan fiction are scorned because they may attract unwanted attention, especially from copyright industries, and put the whole subculture community at risk. The criticism of commercial activities within the *Zimuzu* community, however, demonstrates a more ambivalent attitude: on the one hand, disapproval stems from the social norm that emphasizes open and fair competition; on the other hand, different groups hold different views on how to deal with commercialization and its consequences.

In addition to voluntary involvement in these commercial activities, *Zimuzu*'s work, which is organized as commons-based peer production, is often exploited by for-profit organizations. For example, unaffiliated commercial websites sometimes put up 'stolen' subtitles without attributing them to a *Zimuzu* group. The manufacturers of pirate DVDs who hire college students to translate subtitles, are able to tap into these open sites rich in translated foreign media content. The stronger the brand image built by a subtitle group, the more likely its work will be grave-robbed by commercial organizations. *Zimuzu* members reported that although they are not happy about contributing their labour for free to third parties, they have neither the means nor strong motivation to combat these grave-robbing practices:

> *I am telling you, Zimuzu people are all very naïve—all we want to do is*
>
> *to share the most popular content with the audience…of course we*

know what some people do with our translation, but so what? We

despise those commercial websites that are notorious for grave robbing.

But nobody would stop doing (Zimuzu work) because of this!(Interview

with SS, newly graduated college student, 18.Apr.2009)

Despite *Zimuzu* members' demonstrated resistance to the commodity production

model and their adherence to many of the values of commons-based peer production,

the intertwining of commons-based and commercial incentives confirms that, at least

in this case, commons based peer production is not immune to the commercial logic

of the market. Both voluntary and unintended involvement with commercial

activities in the *Zimuzu* community seem inescapable in face of the need to sustain its

translation activities financially and the growing coverage of digital genres. In the

context of the growth of online markets for digital information and media content,

the temptation to commercialize might be increasing.

Conclusion

As culture becomes increasingly 'malleable, unfixed and fluid' (Poster, 2006,

p. 138), the transformation of cultural objects by a large number of online

participants through commons-based peer production is often celebrated as a new

model of production that is likely to flourish with little or no entanglement with the

commodity production model. The case of *Zimuzu* shows that a hybrid of commons

and commodity is evident in *Zimuzu*'s peer production. Our analysis demonstrates

that there is a constant negotiation over which aspects of the two, seemingly

opposing, models is adopted by the community. We argue that it is important to

conceptualize the peer production process as being influenced by power relations

within and between translation groups as well as between groups and other

commercial organizations. The confluence of values and motivations affects the perceptions of online participants of their individual and collective identities, their empowerment and the equality of their relationships.

The commons and commodity duality of the digital information and media production process in this case manifests itself at different levels. At the level of individual motivation, the *Zimuzu* case confirms that the spread of digital networks is conducive to coordinating the multiple motivations of widely dispersed online communities in support of large-scale, peer production activities. This case demonstrates that when a monetary incentive is introduced as a motivation for contributors, it overshadows non-material incentives and disrupts the orderly process of peer production. However, although there is evidence of a strong norm against 'paid' work using 'real' currency, the *Zimuzu* groups operate a virtual currency which is not convertible to real currency. This relatively unique practice was found to operate in a way that provides a basis for discrimination among *Zimuzu* members with respect to their status in the community and their access to digital content. This suggests that the traditional values of the commercial market are being replicated through the competition to accumulate virtual wealth, and that this should be the subject of future research to explore especially its implications for the spread of hybrid models of peer production.

At the organization level, analysis of the *Zimuzu* case confirms that the perception of egalitarian and meritocratic participation in peer production is overly simplistic. *Zimuzu* participants are mostly college students (studying in China or overseas) and young professionals, and their participation practices are subject to scrutiny from the start of their efforts to contribute. Their access to community resources and their ability to influence the *Zimuzu* production process and its

organization are differentiated hierarchically based on factors such as length of membership, personal relationships with veteran members, and their accumulated virtual wealth. There is evidence of departures from meritocratic decisions making especially in the case of conflicts within the community. Conflicts often are dealt with by a small group of core members rather than through a democratic process.

The findings from this case study suggest that it is reasonable to argue that *Zimuzu* peer production is not autonomous of market logic. It suggests that inter-group competition is likely to play an at least as important, if not more important, role than intra-group meritocracy in assuring quality of production, and the organizational form of peer production often may resemble commodity production despite the goods– translated subtitles in this case –not being sold, for a price, in the market. Competition to establish the brand image of *Zimuzu* groups is fostered by the drive to attract advertising revenue, needed to sustain their activities. Free riding by pirate DVD manufacturers on the volunteer work of *Zimuzu* members introduces additional features of the values and motivations of the mainstream media producers into the framework of the commons-based peer production model. Fuchs (2009, p. 82) argues that 'the category of the prosumer commodity/producer commodity does not signify a democratization of the media towards participatory systems, but the total commodification of human creativity'. The case in this paper provides some indication of the predominance of commodity model, but indicates that some of the values of the *Zimuzu* members are consistent with the commons-based model of openness and potentially democratic decision making. To assess the extent to which Fuchs's claim is valid, further research is needed on the development of *Zimuzu* practices and other similar online peer production activities.

The analysis in this paper is based on an exploratory study and it has several methodological limitations. Access to the *Zimuzu* community members was limited due to the semi-underground nature of the community based on its legal status as a grey area activity. Members of the community were wary about talking to outsiders about their practices. Although participants from every major group were interviewed and hundreds of posts on the open Web forums were sampled, it was not possible to ascertain whether data collection had reached saturation point. We are confident that the three sources of data analysed here are reasonably indicative of the practices that are emerging and that identify very useful avenues for follow-up research, for instance, more interviews with core members of the *Zimuzu* groups. The data for this study include only partial representation of the voices of *Zimuzu* founding members and current leaders. In future research, participant observation might enable immersion in one or more groups and engagement in some translation tasks, both of which would provide greater insight into the values and decision making procedures within groups. Although there would be ethical issues related to self-disclosure, such a strategy would enable the building of a rapport with the community and access to the multifaceted motivations and practices involved in a hybrid form of peer production, the dynamics of within and between group competition, and the relationships between *Zimuzu* groups and the creative industry firms both foreign and domestic, and the Chinese governance regime with respect to online copyrighted content.

These dimensions could be explored by developing a more robust theoretical framework for understanding how power relationships, at the institutional, organizational and individual levels, intersect in peer production communities and how they configure the dynamics of the production in general. In this paper we

explored three specific themes that provide insight into how online peer production communities are shaped by various factors such as the regulatory environment in which they operate, the type of goods they produce, the way that participants relate to each other, and their relationship with proprietary productions. We would suggest that, as a hybrid of commons-based and commodity productions, the exact form of peer production is negotiated through the institutional conditions, community norms and individual subjectivity. In the process, power operates as a generative force that gives rise to the specific arrangements of peer production. The power of commodity and commercial institutions does not necessarily suppress the development of commons-based peer production, but plays an active role in shaping the contours of peer production activities. The omnipresence of generative power in *Zimuzu* is not a denial of the participatory nature of peer production; rather, it prompts us to examine critically the face values (autonomy, freedom, equality) that are often associated with online peer production. The technical specifics and contextual conditions in various peer production communities may be different, but the commons/commodity duality of the information production and the generative power in community governance that is observed in the *Zimuzu* community can be important anchor points for further exploration of online peer production communities.

Word count: 7834 (excluding references)

Date: 23, Feb. 2012

References

Batson, C. D. (1992). *The altruism question: Towards a social psychological answer*. Hillsdale, NJ: Erlbaum.

Benkler, Y. (2002). Coase's Penguin, or, Linux and the Nature of the Firm. *Yale Law Journal, 112*(3), 367-445.

Benkler, Y. (2003). Freedom in the commons: Towards a political economy of information. *Duke Law Journal, 52*(2), 1245-1276.

Benkler, Y. (2004). Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production. *The Yale Law Journal, 114*(2), 273-358.

Benkler, Y. (2006). *The wealth of networks*: Yale University Press New Haven, CT.

Benkler, Y., & Nissenbaum, H. (2006). Commons-based peer production and virtue. *The Journal of Political Philosophy, 14*(4), 394-419.

Berdou, E. (2010). *Organization in open source communities: At the crossroads between th gift and market economies*. Oxford: Routledge.

Bergquist, M., & Ljungberg, J. (2001). The power of gifts: organizing social relationships in open source communities. *Information Systems Journal, 2001*(11), 305-320.

Berry, D. (2008). The poverty of networks. *Theory, Culture & Society, 25*(7-8), 364-372.

Coleman, G. (2009). Code is speech: Legal tinkering, expertise, and protest among Free and Open Source Software developers. *Cultural Anthropology, 24*(3), 420-454.

Coleman, S., & Dyer-Witheford, N. (2007). Playing on the digital commons: collectives, capital and contestation in videogame culture. *Media, culture & society, 29*(6), 934-953.

Elliott, M., & Scacchi, W. (2002). Communicating and Mitigating Conflict in Open Source Software Development Projects. *Working Paper: Institute for Software Research*. Retrieved from http://www.ics.uci.edu/~melliott/commossd.htm

Fiesler, C. (2007). Everything I need to know I learned from fandom: How existing social norms can help shape the next generation of user-generated content. *Vanderbilt Journal of Entertainment and Technology Law, 10*(3), 729-762.

Forte, A., Larco, V., & Bruckman, A. (2009). Decentralization in Wikipedia Governance. *Journal of Management Information Systems, 26*(1), 49-72.

Fuchs, C. (2008). *Internet and Society: Social theory in the information age*. London: Routledge.

Fuchs, C. (2009). Information and communication technologies and society: A contribution to the political economy of the Internet. *European Journal of Communication 24*(1), 69-87.

Jenkins, H. (2007). Transforming fan culture into user-generated conent: The case of FanLib Retrieved August 20, 2011, from http://www.henryjenkins.org/2007/05/transforming_fan_culture_into.html

Jenkins, H. (2008). *Convergence culture*. New York: NYU Press.

Kelty, C. (2008). *Two bits: The cultural significance of free software and the Internet*. Durham: Duke University Press.

Kittur, A., & Kraut, R. E. (2010). *Beyond Wikipedia: Conflict and coordination in online*
production groups. Paper presented at the CSCW 2010: Proceedings of the ACM Conference on
Computer-Supported Cooperative Work, Savannah, Georgia.

Kollock, P. (1998). The economies of online cooperation: gifts and public goods in cyberspace. In P. Kollock & M. A. Smith (Eds.), *Communities in cyberspace* (pp. 220-242). London: Routledge.

Kreiss, D., Finn, M., & Turner, F. (2011). The limits of peer production: Some reminders from Max Weber for the network society. *New Media and Society, 13*(2), 243-259.

Langlois, G., & Elmer, G. (2009). Wikipedia leeches? The promotion of traffic through a collaborative web format. *New Media and Society, 11*(5), 773-794.

Lave, J., & Wenger, E. (1991). *Situated learning: Legtimate peipheral participation*. Cambridge: Cambridge University Press.

Levy, P. (1997). *Collective intelligence: mankind's emerging world in cyberspace*. Cambridge, Mass: Perseus Books.

Lih, A. (2009). *The Wikipedia revolution: How a bunch of nobodies created the world's greatest encyclopaedia*. New York: Hyperion.

Marx, K. (1976). *Capital* (Vol. 1). London: Penguin.

Mockus, A., Fielding, R. T., & Herbsleb, J. D. (2002). Two case studies of Open Source Software development: Apache and Mozilla. *ACM Transactions on Software Engineering and Methodology, 11*(3), 309-346.

O'Mahony, S. (2007). The governance of open source initiatives: what does it mean to be community managed? *Journal of Management and Governance, 11*(2), 139-150.

Oreg, S., & Nov, O. (2007). Exploring motivations for contributing to open source initiatives: The roles of contribution context and personal values. . *Computers in Human Behavior, 24*(5), 2055-2073.

Poster, M. (2006). *Information please: Culture and politics in the age of digital machines*. Durham & London: Duke University Press.

Raymond, E. (1999). *The Cathedral and the bazaar: Musing on LINUX and open source by an accidental revolutionary*. Sebastopol, CA: O'Reilly Media.

Reagle, J. M. (2010). *Good faith collaboration: The culture of Wikipedia*. Cambridge: MIT Press.

Shah, S. K. (2006). Motivation, governance, and the viability of hybrid forms in open source software development. *Management Science, 52*(7), 1000-1014.

Surowiecki, J. (2004). *The Wisdom of Crowds: Why the Many Are Smarter Than the Few*. London: Abacus.

Tapscott, D., & Williams, A. D. (2006). *Wikinomics. How Mass Collaboration Changes Everything*. New York: Penguin.

Terranova, T. (2000). Free labor: Producing culture for the digital economy. *Social Text, 18*(2), 33-58.

Torvalds, L. (1998). First Monday Interview with Linus Torvalds: What motivates free-software developers? *First Monday, 3*(3).

Uricchio, W. (2004). Cultural citizenship in the age of P2P networks. In I. Bondebjerg & P. Golding (Eds.), *Media Cultures in a Changing Europe* (pp. 139-164). Bristol: Intellect Press.

van Dijck, J., & Nieborg, D. (2009). Wikinomics and its discontents: a critical analysis o Web 2.0 business manifestos. *New Media and Society, 11*(5), 855-874.

Weber, S. (2004). *The Success of Open Source*. Cambridge, MA: Havard University Press.

Weiner, B. (1992). *Human motivation: Metaphors, theories, and research*. Thousand Oaks, CA: Sage.

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.

---

[1] YDY is *Yi Dian Yuan*, which is Chinese for the Garden of Eden. YYeTS is 'entertainment for everybody'. TLF is 'the last fantasy'. 1000FR is 'soft wind'.

[2] The most popular instant messaging service in China.

[3] 'Grave' and 'subtitle' has the same pronunciation in Chinese although it is written with different characters.

[4] The Berne Convention governs copyright, specifying that the translation right is a derivative right that has to be authorized by the right holder.

[5] All interview quotes and online posting excerpts were translated from Chinese by the authors.

[6] This term refers to those organized groups that distribute unauthorized copyright infringing content such as software, video games, movies, etc. This differs from P2P file sharing among friends or people with similar interests.