'You've got fifteen seconds. Impress me.'

An advertisement for Applebox Productions depicts the new youth consumer: his scraggly dishwater blonde hair hangs down into his glaring eyes, his chin is thrust out, his mouth is turned down into a challenging sneer, and his finger posed over the remote. One false move and he'll zap us. He's young, male, and in control. No longer a couch potato, he determines what, when, and how he watches media. He is a media consumer, perhaps even a media fan, but he is also a media producer, distributor, publicist, and critic. He's the poster child for the new interactive audience.

The advertisement takes for granted what cultural studies researchers struggled to establish throughout the 1980s and 1990s – that audiences were active, critically aware, and discriminating. Yet, this advertisement promises that Applebox productions has developed new ways to overcome his resistance and bring advertising messages to this scowling teen's attention. The interactive audience is not autonomous, still operating alongside powerful media industries.

If the current media environment makes visible the once invisible work of media spectatorship, it is wrong to assume that we are somehow being liberated through improved media technologies. Rather than talking about interactive technologies, we should document the interactions that occur amongst media consumers, between media consumers and media texts, and between media consumers and media producers. The new participatory culture is taking shape at the intersection between three trends:

(1) new tools and technologies enable consumers to archive, annotate, appropriate, and recirculate media content

(2) a range of subcultures promote Do-It-Yourself (DIY) media production, a discourse that shapes how consumers have deployed those technologies

(3) economic trends favoring the horizontally integrated media conglomerates encourage the flow of images, ideas, and narratives across multiple media channels and demand more active modes of spectatorship.

In this essay, I will try to describe how these three trends have altered the way media consumers relate to each other, to media texts, and to media producers. In doing so, I hope to move beyond the either-or logic of traditional audience research -- refusing to see media consumers as either totally autonomous from nor totally vulnerable to the culture industries. It would be naive to assume that powerful conglomerates will not protect their own interests as they enter this new media marketplace, but at the same time, audiences are gaining greater power and autonomy as they enter into the new knowledge culture. The interactive audience is more than a marketing concept and less than "semiotic democracy."

COLLECTIVE INTELLIGENCE

In *Collective Intelligence*, Pierre Levy offers a compelling vision of the new 'knowledge space', or what he calls 'the cosmopedia,' which might emerge as citizens more fully realize the
potentials of the new media environment. Rejecting technological or economic determinism, Levy sees contemporary society as caught in a transitional moment, whose outcome is still unknown, but which has enormous potentials for transforming existing structures of knowledge and power. His book might best be read as a form of critical utopianism framing a vision for the future (‘an achievable utopia’), offering an ethical yardstick for contemporary developments.

Levy explores how the 'deterritorialization' of knowledge, brought about by the ability of the net and the web to facilitate rapid many-to-many communication, might enable broader participation in decision-making, new modes of citizenship and community, and the reciprocal exchange of information. Levy draws a productive distinction between organic social groups (families, clans, tribes), organized social groups (nations, institutions, religions, and corporations) and self-organized groups (such as the virtual communities of the web). He links the emergence of the new knowledge space to the breakdown of geographic constraints on communication, of the declining loyalty of individuals to organized groups, and of the diminished power of nation-states to command the exclusive loyalty of their citizens. The new knowledge communities will be voluntary, temporary, and tactical affiliations, defined through common intellectual enterprises and emotional investments. Members may shift from one community to another as their interests and needs change and they may belong to more than one community at the same time. Yet, they are held together through the mutual production and reciprocal exchange of knowledge. As Levy explains,

the members of a thinking community search, inscribe, connect, consult, explore......Not only does the cosmopedia make available to the collective intellect all of the pertinent knowledge available to it at a given moment, but it also serves as a site of collective discussion, negotiation, and development......Unanswered questions will create tension within cosmopedic space, indicating regions where invention and innovation are required. (1)

On-line fan communities might well be some of the most fully realized versions of Levy's cosmopedia, expansive self-organizing groups focused around the collective production, debate, and circulation of meanings, interpretations, and fantasies in response to various artifacts of contemporary popular culture. Fan communities have long defined their memberships through affinities rather than localities. Fandoms were virtual communities, 'imagined' and 'imagining' communities, long before the introduction of networked computers. (2) The history of science fiction fandom might illustrate how knowledge communities emerged. Hugo Gernsbeck, the pulp magazine editor who has been credited with helping to define science fiction as a distinctive genre in the 1920s and 1930s, was also a major advocate of radio as a participatory medium. Gernsbeck saw science fiction as a means of fostering popular awareness of contemporary scientific breakthroughs at a moment of accelerating technological development. (3) The letter column of Gernsbeck's Astounding Stories became a forum where lay people could debate scientific theories and assess new technologies. Using the published addresses, early science fiction fans formed an informal postal network, circulating letters and amateur publications. Later, conventions facilitated the face-to-face contact between fans from across the country and around the world. Many of the most significant science fiction writers emerged from fandom. Given this history, every reader was understood to be a potential writer and many fans aspired to break into professional publication; fan ideas influenced commercially-distributed works at a time when science fiction was still understood predominantly as a micro-genre aimed at a small but passionate niche market. The fan-issued Hugo award (named after Gernsbeck) remains the most valued recognition a science fiction writer can receive. This reciprocity between readers,
writers, and editors set expectations as science fiction spread into film and television. *Star Trek* fans were, from the start, an activist audience, lobbying to keep its series on the air and later advocating specific changes in the program content to better reflect its own agendas. Yet, if fans were the primary readers for literary science fiction, they were only a small fraction of the audience for network television. Fans became, in John Tulloch's words, a 'powerless elite,' unable to alter the series content but actively reshaping the reception context through grassroots media production.\(^4\)* *Star Trek* fandom, in turn, was a model for other fan communities to create forums for debating interpretations, networks for circulating creative works, and channels for lobbying the producers. Fans were early adopters of digital technologies. Within the scientific and military institutions where the Internet was first introduced, science fiction has long been a literature of choice.\(^5\)* Consequently, the slang and social practices employed on the early bulletin boards were often directly modeled on science fiction fandom. Mailing lists focused on fan topics took their place alongside discussions of technological or scientific issues. In many ways, cyberspace is fandom writ large. The reconstitution of these fandoms as digital enclaves did not come without strenuous efforts to overcome the often overtly hostile reception fan women received from the early Internet's predominantly male population. Operating outside of those technical institutions, many female fans lacked computer access and lacked technical literacy. Heated debates erupted at conventions as fans were angered at being left behind when old fan friends moved online. At the same time, as Sue Clerc notes, fan communities helped many women make the transition to cyberspace; the group insured that valued members learned to use the new technologies, since 'For them, there is little benefit to net access unless many of their friends have it.'\(^6\)* Fan women routed around male hostility, developing web communities 'that combine the intimacy of small groups with a support network similar to the kind fan women create off-line.' Discussion lists, mailing groups, webrings, and chatrooms each enabled fan communication.

Nancy Baym has discussed the important functions of talk within on-line soap fandom: 'Fans share knowledge of the show's history, in part, because the genre demands it. Any soap has broadcast more material than any single fan can remember.'\(^7\)* Fans inform each other about program history or recent developments they may have missed. The fan community pools its knowledge because no single fan can know everything necessary to fully appreciate the series. Levy distinguishes between shared knowledge (which would refer to information known by all members of a community) and collective intelligence (which describes knowledge available to all members of a community). Collective intelligence expands a community's productive capacity because it frees individual members from the limitations of their memory and enables the group to act upon a broader range of expertise. As Levy writes, within a knowledge community, 'no one knows everything, everyone knows something, all knowledge resides in humanity.'\(^8\)* Baym argues:

'A large group of fans can do what even the most committed single fan cannot: accumulate, retain, and continually recirculate unprecedented amounts of relevant information……. [Net list] participants collaboratively provide all with the resources to get more story from the material, enhancing many members' soap readings and pleasures.'\(^9\)*

Soap talk, Baym notes, allows people to 'show off for one another' their various competencies while making individual expertise more broadly available. Fans are motivated by epistemaphilia - not simply a pleasure in knowing but a pleasure in exchanging knowledge. Baym argues that
fans see the exchange of speculations and evaluations of soaps as a means of comparable, refining, and negotiating understandings of their socioemotional environment. Matthew Hills has criticized audience researchers for their preoccupation with fan's meaning production at the expense of consideration of their affective investments and emotional alliances. Yet, as Baym's term, 'socioemotional' suggests, meanings are not some abstracted form of knowledge, separated from our pleasures and desires, isolated from fandom's social bonds. When fans talk about meaningful encounters with texts, they are describing what they feel as much as what they think. Fandom is held together as much through those shared expressions of emotion and desire - by what Sue Clerc, drawing on fan slang, calls 'drool' - as through the exchange of program specific information. Yet, at the same time, conflicting assumptions and interpretations, competing ways of knowing can become the basis for deeply felt antagonisms, with "unforgivable" lapses resulting in social rifts. Fan speculations may, on the surface, seem to be simply a deciphering of the aired material but increasingly, speculation involves fans in the production of new fantasies, broadening the field of meanings that circulate around the primary text. For example, in the early 1990s, I documented the activities of alt.rec.arts.twin-peaks, a group devoted to discussing David Lynch's cult mystery/soap opera series. Their stated goal was to 'break the code and solve the crime,' that is, to successfully predict future revelations about the Laura Palmer murder and thus to arrive at the 'truth' of the series. But as each member mobilized and interpreted the series 'evidence,' they introduced a range of different potential narratives, centering on alternative assumptions about 'who done it' and how Laura's death fit within larger schemes. Fan speculations were, in fact, more original and complex than the solution the series ultimately provided. Their ability to recognize previously undiscovered narrative possibilities enlarged their pleasure in watching Twin Peaks and the group actively sought to recruit new members in order to expand the range of possible interpretations in play. Levy contrasts his ideal of 'collective intelligence' with the dystopian image of the 'hive mind,' where individual voices are suppressed. Far from demanding conformity, the new knowledge culture is enlivened by multiple ways of knowing. This collective exchange of knowledge cannot be fully contained by previous sources of power - 'bureaucratic hierarchies (based on static forms of writing), media monarchies (surfing the television and media systems), and international economic networks (based on the telephone and real-time technologies)' - which depended on maintaining tight control over the flow of information. The dynamic, collective, and reciprocal nature of these exchanges undermines traditional forms of expertise and destabilizes attempts to establish a scriptural economy in which some meanings are more valuable than others. The old commodity space was defined through various forms of decontextualization, including the alienation of labor, the uprooting of images from larger cultural traditions so that they can circulate as commodities, the demographic fragmentation of the audience, the disciplining of knowledge, and the disconnect between media producers and consumers. The new information space involves multiple and unstable forms of recontextualization. The value of any bit of information increases through social interaction. Commodities are a limited good and their exchange necessarily creates or enacts inequalities. But, meaning is a shared and constantly renewable resource and its circulation can create and revitalize social ties. If old forms of expertise operated through isolated disciplines, the new collective intelligence is a 'patchwork' woven together from many sources as members pool what they know creating something much more powerful than the sum of its parts.

**HOW COMPUTERS CHANGED FANDOM**

For Levy, the introduction of high-speed networked computing constituted an epistemological
turning point in the development of collective intelligence. If fandom was already a knowledge culture well before the internet, then how did transplanting its practices into the digital environment alter the fan community? The new digital environment increases the speed of fan communication, resulting in what Matthew Hills calls 'just in time fandom.' If fans once traded ideas through the mails, they now see the postal service as too slow - 'snail mail' - to satisfy their expectations of immediate response. Hills explains, 'the practices of fandom have become increasingly enmeshed with the rhythms and temporalities of broadcasting, so that fans now go online to discuss new episodes immediately after the episode's transmission time or even during ad-breaks perhaps in order to demonstrate the "timeliness" and responsiveness of their devotion.' Where fans might have raced to the phone to talk to a close friend, they can now access a much broader range of perspectives by going on-line. Hills worries that the broadcast schedule may be determining what can be discussed and when. This expectation of timeliness complicates the global expansion of the fan community, with time lags in the distribution of cultural goods across national markets hampering full participation from fans that will receive the same program months or even years later. International fans often complain that they are additionally disadvantaged because their first time experience of the episodes is 'spoiled' by learning too much from the online discussions. The digital media also alters the scope of communication. Fandoms centering on Asian popular culture, such as Japanese anime or Hong Kong action films, powerfully exploit the Internet's global reach. Japanese fans collaborate with American consumers to insure the underground circulation of these cultural products and to explain cultural references, genre traditions, and production histories. Anime fans regularly translate and post the schedule of Japanese television so that international fans can identify and negotiate access to interesting programs. American fans have learned Japanese, often teaching each other outside of a formal educational context, in order to participate in grassroots projects to subtitle anime films or to translate manga. Concerned about different national expectations about what kinds of animation are appropriate for children, anime fans have organized their own ratings groups. This is a new cosmopolitanism - knowledge sharing on a global scale.

As the community enlarges and as reaction time shortens, fandom becomes much more effective as a platform for consumer activism. Fans can quickly mobilize grassroots efforts to save programs or protest unpopular developments. New fandoms emerge rapidly on the web - in some cases before media products actually reach the market. As early participants spread news about emergent fandoms, supporters quickly develop the infrastructure for supporting critical dialogue, producing annotated program guides, providing regular production updates, and creating original fan stories and artwork. The result has been an enormous proliferation of fan websites and discussion lists. Kirsten Pullen estimates, for example, that as of June 2000 there were more than 33,000 fan websites listed in the Yahoo! Web Directory, dealing with individual performers, programs, and films - with 1200 websites devoted to Star Trek alone! One portal, Fan Fiction on the Web, lists more than three hundred different media texts which have generated at least some form of fan fiction, representing a much broader array of genres than previously suspected.

As fandom diversifies, it moves from cult status towards the cultural mainstream, with more Internet users engaged in some form of fan activity. This increased visibility and cultural centrality has been a mixed blessing for a community used to speaking from the margins. The speed and frequency of communication may intensify the social bonds within the fan community. In the past, fans inhabited a 'week-end only world,' seeing each other in large numbers only a few times a year - at conventions. Now, fans may interact daily, if not hourly, online. Geographically isolated fans can feel much more connected to the fan community and
home-ridden fans enjoy a new level of acceptance. Yet, fandom's expanded scope can leave fans feeling alienated from the expanding numbers of strangers entering their community. This rapid expansion outraces any effort to socialize new members. For example, fandom has long maintained an ethical norm against producing erotica about real people rather than fictional characters. As newer fans have discovered fan fiction online, they have not always known or accepted this prohibition and so there is a growing body of fan erotica dealing with celebrities. Such stories become a dividing point between older fans committed to traditional norms and the newer on-line fans who have asserted their rights to redefine fandom on their own terms. Online fan discussion lists often bring together groups who functioned more or less autonomously off-line and have radically different responses to the aired material. Flame wars erupt as their taken-for-granted interpretive and evaluative norms rub against each other. In some cases, fans can negotiate these conflicts by pulling to a metalevel and exploring the basis for the different interpretations. More often, the groups splitter into narrower interests, pushing some participants from public debates into smaller and more private mailing lists. Levy describes a pedagogical process through which a knowledge community develops a set of ethical standards and articulates mutual goals. Even on a scale much smaller than Levy's global village, fandoms often have difficulty arriving at such a consensus. While early accounts of fandom stressed its communitarian ideals, more recent studies have stressed recurring conflicts. Andre MacDonald has described fandom in terms of various disputes - between male and female fans, between fans with different assumptions about the desired degree of closeness of the producers and stars, between fans who seek to police the production of certain fantasies and fans who assert their freedom from such constraints, between different generations of fans, and so forth. MacDonald depicts a community whose utopian aspirations are constantly being tested against unequal experiences, levels of expertise, access to performers and community resources, control over community institutions, and degrees of investment in fan traditions and norms. Moreover, as Nancy Baym suggests, the desire to avoid such conflicts can result in an artificial consensus which shuts down the desired play with alternative meanings. Levy seemingly assumes a perfect balance between mechanisms for producing knowledge and for sustaining affiliations. Yet, MacDonald and Baym suggest a constant tension between these two goals, which can reach a crisis state as list memberships have expanded alongside the expedient growth of net subscribers. Networked computing has also transformed fan production. Web publication of fan fiction, for example, has almost entirely displaced printed zines. Fanzines arose as the most efficient means of circulating fan writing. Fan editors charged only the costs of reproduction, seeing zines as a vehicle for distributing stories and not as a source of income. In some fandoms, circuits developed for loaning individually photocopied stories. In other cases, readers and editors came to see zines as aesthetic artifacts, insisting on high quality reproduction and glossy color covers. Fans have increasingly turned to the web to lower the costs of production and to expand their reading public. Fans are also developing archives of older zine stories, helping to connect newer fans with their history. The higher visibility of fan fiction on the web has inspired many new writers to try their hand and spread the practice to new fandoms, yet older fans complain of the lack of editing and nurturing of emerging talents. In several cases, fans have organized themselves to map out alternative story arcs and to script their own episodes when series were canceled or took unwelcome turns. Digital technologies have also enabled new forms of fan cultural production. Photoshop collage has become popular as a means of illustrating fan fiction and now digital art may go to auction at cons alongside illustrations done in pen and ink, colored pencil, or oil. For a time, mp3s of filk music could be readily downloaded alongside
commercial favorites through Napster. Elena Garfinkle and Eric Zimmerman have documented the emergence of Kitsekae or digital paperdolls, that can be dressed and undressed by the user and programmed to perform simple actions. The Kitsekae become vehicles for erotic play and fantasy - primarily among anime fans. (24) Similarly, game fans have produced short animated films using game engines, developed to enable Quake enthusiasts to record and replay their game play. Fans call these new works machinema after a Japanese word that refers to puppetry. (25) Game avatars become, in effect, puppets that enable fan artists to tell their own stories. The scrapbook function in The Sims has similarly enabled new forms of fan fiction, as fans play the game in order to create the images necessary to illustrate their stories. In some cases, they also develop "skins" designed to represent favorite television or comicbook characters. Fan artists have been part of the much larger history of amateur film and video production. George Lucas and Steven Spielberg, were themselves amateur filmmakers as teenagers, producing low-budget horror or science fiction movies. Star Wars, in turn, has inspired super 8 filmmakers since its release in the early 1970s. Some British fan clubs produced original episodes of Doctor Who, sometimes filming in the same gravel quarries as the original series. As the videocassette recorder became more widely available, fans re-edited series footage into music videos, using popular music to encapsulate the often-unarticulated emotions of favorite characters. (26) As fan video makers have become more sophisticated, some fan artists have produced whole new storylines by patching together original dialogue.

The World-Wide-Web is a powerful distribution channel, giving what were once home movies a surprising degree of public visibility. Publicity materials surface while these amateur films are still in production, most of the films boast lavish movie posters, and many of them include downloadable trailers to attract would-be viewers impatient with download times. Star Wars fans were among the first to embrace these new technologies, producing at last count more than 300 web movies. (27) These fans exploited the various merchandise surrounding this blockbuster film franchise for raw materials to their homegrown movies. An important genre of fan filmmaking involves animating action figures. Other films take advantage of commercially available costumes and props or raid videos and sound track albums for their sound effects and music. These fan filmmakers have used home computers to duplicate effects Lucasfilm had spent a fortune to achieve several decades earlier; many fan films create their own light saber or space battles. Some of these fan filmmakers have gotten offers for professional projects or had their films screened at international film festivals. When Amazon.com offered videos of one favorite amateur Star Wars Production, George Lucas in Love, it outsold The Phantom Menace during its first week in circulation. Amateur film culture has already made an impact on the commercial mainstream. Spike Jonz, the director of Being John Malcovich, for example, got his start making amateur films within the skateboard subculture. Similarly, MTV's Jackass, took its inspiration from the web based distribution of amateur stunt films, while Celebrity Death Match adopts an aesthetic remarkably similar to action figure cinema. In the future, amateur productions may initiate many innovations in popular culture which gain higher visibility as they are pulled into mainstream media, much as the fans appropriate and recirculate materials from commercial culture.

KNOWLEDGE CULTURE MEETS COMMODITY CULTURE

Levy distinguishes between four potential sources of power – nomadic mobility, control over territory, ownership over commodities, and mastery over knowledge – and suggests a complex set of interactions and negotiations between them. The emergent knowledge cultures never fully
escape the influence of the commodity culture, any more than commodity culture can totally function outside the constraints of territoriality. But knowledge cultures will, he predicts, gradually alter the ways that commodity culture operates. Nowhere is that transition clearer than within the culture industries, where the commodities that circulate become resources for the production of meaning: 'The distinctions between authors and readers, producers and spectators, creators and interpretations will blend to form a reading-writing continuum, which will extend from the machine and network designers to the ultimate recipient, each helping to sustain the activities of the others.' (28)

Creative activity, he suggests, will shift from the production of texts or the regulation of meanings towards the development of a dynamic environment, 'a collective event that implies the recipients, transforms interpreters into actors, enables interpretation to enter the loop with collective action.'(29) Room for participation and improvisation are being built into new media franchises. Kurt Lancaster, for example, has examined how commercial works (including computer, role playing and card games) surrounding the cult science fiction series, *Babylon 5*, facilitate a diverse range of fan performances, allowing fans to immerse themselves in the fantasy universe. (30) The producers of the teen melodrama, *Dawson's Creek*, hired a team of writers to produce a website modeled on the protagonist's laptop and including e-mail correspondence, personal journals, and class essays, updated weekly in response to and in anticipation of the aired episodes. As the site developed, fans were offered opportunities to correspond in character with Dawson and his friends and thus be incorporated into the commercial text. Cult works were once discovered, now they are being consciously produced, designed to provoke fan interactions. The producers of *Xena*, for example, were fully aware that some fans wanted to read Xena and Gabrielle as lesbian lovers and thus began to consciously weave 'subtext' into the episodes. As Levy explains, 'The recipients of the open work are invited to fill in the blanks, choose among possible meanings, confront the divergences among their interpretations.' (31)

To be marketable the new cultural works will have to provoke and reward collective meaning production through elaborate back stories, unresolved enigmas, excess information, and extratextual expansions of the program universe. (32) There has been a marked increase in the serialization of American television, the emergence of more complex appeals to program history, the development of more intricate story arcs and cliffhangers, over the past decade. To some degree, these aesthetic shifts can be linked to new reception practices enabled by the home archiving of videos, net discussion lists, and web program guides. These new technologies provide the information infrastructure necessary to sustain a richer form of television content, while these programs reward the enhanced competencies of fan communities. Television producers are increasingly knowledgeable about their fan communities, often courting their support through networked computing. *Babylon 5* producer J. Michael Straczinski actively courted the science fiction fan community, long before his proposed series was approved for production. He cited the fan buzz to demonstrate its market potential and the fans lobbied local stations to purchase the syndicated series. The series producer, known affectionately by his user name, JMS, went on-line daily, responding to questions about his complex and richly developed narrative. Kurt Lancaster estimates that JMS may have made more than 1700 posts to the fan community, sometimes actively engaging with flame wars with individual fans as well as conducting what he saw as a continuing seminar on the production of genre television. (33) While JMS sought to be more accessible to fans, he found it difficult to shed his authority or escape a legal and economic system designed, in part, to protect corporate interests from audience
appropriation. His lawyers warned him that he would have to leave the group if there was danger that he would be exposed to fan speculations that might hold him hostage to potential plagiarism suits. Such restrictions reimpose the hierarchy of commodity culture over the informal reciprocality of the knowledge culture. While JMS is perhaps unique in the degree of his exposure to fans, other producers have shown a similar awareness of online fan discourse. For example, when the WB Network postponed the season finale of *Buffy the Vampire Slayer* in the wake of the Columbine shootings, producer Joss Whedon made a notorious public call for Canadian fans to 'bootleg that puppy' and distribute it via the web to American viewers. Fans, in turn, rallied to Whedon's defense when the religious right launched a letter-writing campaign against the introduction of a lesbian relationship involving series regulars.\(^{(34)}\) By contrast, *Survivor* producer Mark Burnett engaged in an active disinformation campaign to thwart audience efforts to predict the winner of its million-dollar competition, burying false leads in the official website awaiting discovery by fan hackers. When longtime World Wrestling Federation announcer Jerry Lawler was fired, he brought his side of his disputes with Vince McMahon directly to on-line fans. Some of these producers sought to deceive, others to inform the fan community, but each showed an awareness of how online discourse reframed the reception context for television programs. For many media producers, who still operate within the old logic of the commodity culture, fandom represents a potential loss of control over their intellectual property. The efforts of the recording industry to dismantle Napster demonstrated that the traditional media companies were prepared to spend massive sums in legal action against new forms of grassroots distribution. The recording industry explicitly framed the case as a chance to 'educate' the public about corporate intellectual property rights and thus avoid future 'piracy.'\(^{(35)}\) Television producers, film studios, and book publishers have been equally aggressive in issuing 'cease and desist' letters to fan websites that transcribe program dialogue or reproduce unauthorized images. If new media has made visible various forms of fan participation and production, then these legal battles demonstrate the power still vested in media ownership.

The horizontal integration of the entertainment industry - and the emergent logic of synergy - depends on the circulation of intellectual properties across media outlets.\(^{(36)}\) Transmedia promotion presumes a more active spectator who can and will follow these media flows. Such marketing strategies promote a sense of affiliation with and immersion in fictional worlds. The media industry exploits these intense feelings through the marketing of ancillary goods from t-shirts to games with promises of enabling a deeper level of involvement with the program content. However, attempts to regulate intellectual property undercut the economic logic of media convergence, sending fans contradictory messages about how they are supposed to respond to commercial culture.\(^{(37)}\) Rosemary Coombes and Andrew Herman have documented intensifying legal and political skirmishes between corporate lawyers and consumers. Many fan webmasters post their 'cease and desist' letters in order to shame the media industries: shutting down grassroots promotional efforts results in negative publicity.\(^{(38)}\) Often, the conflict boils down to an issue of who is authorized to speak for a series, as when a Fox television executive justifies the closing of *Simpsons* fansites: 'We have an official website with network approved content and these people don't work for us.' It is perhaps symptomatic of this highly charged legal culture that fandom.com, a company created to support fan community activities and thwart 'cyberbullying,' almost immediately began issuing 'cease and desist' letters to other sites which used the term, fandom. Ultimately, fandom.com was forced to back down but only after it had totally undercut its claims to be 'by and for fans.' Levy sees industry panic over interactive audiences as short-sighted: 'by preventing the knowledge space from becoming autonomous,
they deprive the circuits of commodity space……of an extraordinary source of energy.' The knowledge culture, he suggests, serves as the 'invisible and intangible engine' for the circulation and exchange of commodities. The on-line book dealer, Amazon.com, has linked bookselling to the fostering of on-line book culture. Readers are encouraged to post critical responses to specific works or to compile lists of their favorite books. Their associates program creates a powerful niche marketing system: Amazon patrons are offered royalties for every sale made on the basis of links from their sites. Similarly, the sports network, ESPN, sponsors a fantasy baseball league, a role-playing activity in which sports fans form teams, trade players, and score points based on the real world performance of various athletes. Such activities give an incentive for viewers to tune into ESPN for up-to-the-minute statistics.

Attempts to link consumers directly into the production and marketing of media content are variously described as 'permission-based marketing,' 'relationship marketing' or 'viral-marketing' and are increasingly promoted as the model for how to sell goods, cultural and otherwise, in an interactive environment. Jupiter Communications notes that 57 percent of consumers visit a new site based on word of mouth. As one noted industry guide explains, 'Marketing in an interactive world is a collaborative process with the marketer helping the consumer to buy and the consumer helping the marketer to sell.' Researchers are finding that fandom and other knowledge communities foster a sense of passionate affiliation or brand loyalty that insures the longevity of particular product lines. In viral marketing, such affiliations become self-replicating as marketers create content which consumers want to actively circulate among their friends. Even unauthorized and vaguely subversive appropriations can spread advertising messages, as occurred through internet spoofs of the Budweiser 'whazzup' commercials.

Building brand loyalty requires more than simply coopting grassroots activities back into the commodity culture. Successful media producers are becoming more adept at monitoring and serving audience interests. The games industry, which sees itself as marketing interactive experiences rather than commodities, has been eager to broaden consumer participation and strengthen the sense of affiliation players feel towards their games. Lucas Arts has integrated would-be Star Wars gamers into the design team for the development of their massively multi-player on-line game. A webpage was created early in the design process and ideas under consideration were posted for fan feedback. Kurt Squire describes the benefits of this 'participatory design' process: 'Ordinary users, who are ordinarily left out of the design process, can bring their expertise using products to the conversation, and help ensure more usable products. This ends up saving money for the designers, who can spend less energy in user/customer support. And, of course, this process results in more usable products, which benefits everyone.' Game companies often circulate their game engines as shareware, seeking to unleash the creative potential of their consumers. In some cases, fan designed "mods" or game worlds (such as Counterstrike) have been integrated into the commercial releases. Maxis, the company which manages the Sims franchise, encourages the grassroots production and trading of 'skins' (new character identities), props and architectural structures, even programming code. Sims creator Will Wright refers to his product as a "sandbox" or "doll house," viewing it as an authoring where consumers can play out their own stories, than as a "hard-rails" game. Ultimately, Wright predicts, two-thirds of Sims content will come from consumers.

It remains to be seen, however, whether these new corporate strategies of collaboration and consultation with the emerging knowledge communities will displace the legal structures of the old commodity culture. How far will media companies be willing to go to remain in charge of
their content or to surf the information flow? In an age of broadband delivery, will television producers see fans less as copyright infringers and more as active associates and niche marketers? Will global media moguls collaborate with grassroots communities, such as the anime fans, to insure that their products get visible in the lucrative American market?

FROM JAMMERS TO BLOGGERS

In his 1993 essay, 'Culture Jamming: Hacking, Slashing and Sniping in the Empire of Signs,' Mark Dery documented emerging tactics of grassroots resistance (‘media hacking, informational warfare, terror-art and guerilla semiotics’) to ‘an ever more intrusive, instrumental technoculture whose operant mode is the manufacture of consent through the manipulation of symbols.’ In Citizens Band Radio slang, the term, ‘jamming’, refers to efforts to ‘introduce noises into the signal as it passes from transmitter to receiver.’ Culture Jammers refused to be ‘passive shoppers' and insisted on their right to insert alternative ideas into the meme-stream. Dery's culture jammers responded to an odd and contradictory mix of ideological impulses. On the one hand, they drew their critique of media power from the Frankfort School, assuming that modern media represents a 'one way information pipeline that only transmits, never receives,' while media consumers are largely being blinded to their own interests, distracted by 'bread and circuses' entertainment and distorted news reports. Classic avant gardists, jammers celebrate their own freedom from media control even as they see the 'masses' as still subjected to manipulation.

Dery's essay records an important juncture in the history of DIY media. Over the past several decades, emerging technologies - ranging from the photocopier to the home computer and the video cassette recorder - have granted viewers greater control over media flows, enabled activists to reshape and recirculate media content, lowered the costs of production, and paved the way for new grassroots networks. Recognizing that their revolution would not be televised, the 1960s counterculture created an alternative media culture, using everything from rock to underground newspapers, from poster art to people's radio, to communicate outside the corporately controlled media, and in the process, student leaders proposed theories of participatory culture that would influence subsequent activists. The DIY aesthetic got a second wind in the 1980s as punk rockers, queer activists, and third wave feminists, among others, embraced photocopied zines, stickers, buttons, and t-shirts as vehicles for cultural and political expression. These groups soon recognized the radical potential of videotape for countersurveillance and embraced the 'digital revolution' as an extension of earlier movements towards media democracy.

Many of the groups Dery describes, such as Adbusters, ACT UP, Negativeland, The Barbie Liberation Army, Paper Tiger Television, and the Electronic Disturbance Community, would happily embrace his 'culture jammer' banner. Yet, Dery over-reached in describing all forms of DIY media as 'jamming.' These new technologies would support and sustain a range of different cultural and political projects, some overtly oppositional, others more celebratory, yet all reflecting a public desire to participate within, rather than simply consume, media. Dery, for example distorts the fan community concept of 'slash' when he uses it to refer to 'any form of jamming in which tales told for mass consumption are perversely reworked.' Unlike the other jammers he discusses, however, fans do not see television content as 'ugly, dull and boring' or necessarily see themselves as acting in opposition to dominant media institutions. Fans would strongly disagree with Mark Crispin Miller, who Dery quotes sympathetically as explaining, 'TV has no spontaneous defenders, because there is almost nothing in it to defend.' Culture jammers want to opt out of media consumption and promote a purely negative and reactive conception of popular culture. Fans, on the other hand, see unrealized potentials in popular
culture and want to broaden audience participation. Fan culture is dialogic rather than disruptive, affective more than ideological, and collaborative rather than confrontational. Culture jammers want to 'jam' the dominant media, while poachers want to appropriate their content, imagining a more democratic, responsive, and diverse style of popular culture. Jammers want to destroy media power, while poachers want a share of it.

'The territory mapped by this essay ends at the edge of the electronic frontier,' Derry wrote, expressing optimism about the emerging political and cultural power grassroots media activists might enjoy in a context where media flows are multi-directional. Yet, he also cautions that the media industries will find alternative means of marginalizing and disenfranchising citizen participation. Such a new media culture might finally respond to the jammers' 'dream of community... and yearning for meaning and cohesion.' Returning to this same terrain at the end of the decade, it is clear that new media technologies have profoundly altered the relations between media producers and consumers. Both culture jammers and fans have gained greater visibility as they have deployed the web for community building, intellectual exchange, cultural distribution, and media activism. Some sectors of the media industries have embraced active audiences as an extension of their marketing power, have sought greater feedback from their fans, and have incorporated viewer generated content into their design processes. Other sectors have sought to contain or silence the emerging knowledge culture. The new technologies broke down old barriers between media consumption and media production. The old rhetoric of opposition and cooptation assumed a world where consumers had little direct power to shape media content and where there were enormous barriers to entry into the marketplace, whereas the new digital environment expands their power to archive, annotate, appropriate, and recirculate media products.

This essay has used Pierre Levy's concept of collective intelligence to examine the transformed role of the audience in this new media economy. Levy rejects any notion that the new knowledge communities should be framed in terms of their resistance to the power of the culture industries, even if he also rejects the idea that their activities can simply be subsumed to corporate interests. Levy describes a world where grassroots communication is not a momentary disruption of the corporate signal but the routine way that the new media system operates: 'Until now we have only reappropriated speech in the service of revolutionary movements, crises, cures, exceptional acts of creation. What would a normal, calm, established appropriation of speech be like?'

Perhaps, rather than talking about culture jammers, we might speak of bloggers. The term, 'blog,' is short for weblog, a new form of personal and subcultural expression involving summarizing and linking to other sites. In some cases, bloggers actively deconstruct pernicious claims or poke fun at other sites; in other cases, they form temporary tactical alliances with other bloggers or with media producers to insure that important messages get more widely circulated. These bloggers have become important grassroots intermediaries - facilitators, not jammers, of the signal flow. Blogging describes a communication process, not an ideological position.

As Levy writes:

> The new proletariat will only free itself by uniting, by decategorizing itself, by forming alliances with those whose work is similar to its own (once again, nearly everyone), by bringing to the foreground the activities they have been practicing in shadow, by assuming responsibility - globally, centrally, explicitly - for the production of collective intelligence.
Bloggers take knowledge in their own hands, enabling the successful navigation within and between these emerging knowledge cultures. One can see such behavior as cooptation into commodity culture in so far as it sometimes collaborates with corporate interests, but one can also see it as increasing the diversity of media culture, providing opportunities for greater inclusiveness, and making commodity culture more responsive to consumers. In an era marked both by the expanded corporate reach of the commodity culture and the emerging importance of grassroots knowledge cultures, consumer power may now be best exercised by blogging rather than jamming media signals.

2 The phrase, "imagined community," comes from Benedict Anderson, Imagined Communities: Reflections on The Origin and Spread of Nationalism (New York: Verso, 1991). Anderson argues we feel strong affiliations with nation states even though they are too large for us to have personal contacts with all of the other citizens and cites the role media plays in providing the social cement between these scattered populations. Levy, p.125, introduces the concept of an "imaging community" to describe how a sense of affiliation emerges from an active process of self-definition and reciprocal knowledge transfer.
3 A fuller account of Gernsbeck's role in the development of science fiction fandom can be found in Andrew Ross, Strange Weather: Culture, Science and Technology in the Age of Limits (New York: Verso, 1991). For a fuller account of contemporary literary SF fandom, see Camile Bacon-Smith, Science Fiction Culture (Philadelphia: University of Pennsylvania Press, 2000).
8 Levy, p. 20.
9 Baym, pp.115-116.
10 Baym, p.127.
12 Susan J. Clerc, "DDEB, GATB, MPPB and the Ratboy: The X-Files Media Fandom, Online and Off," in David Lavery, Angela Hague and Marla Cartwright (eds.) Deny All Knowledge: Reading the X-Files (Syracuse: Syracuse University Press, 1996).
13 Henry Jenkins, "Do You Enjoy Making the Rest of Us Feel Stupid":alt.tv.twinpeaks, the Trickster Author and Viewer Mastery" in David Lavery (Ed.) Full of Secrets: Critical Approaches to Twin Peaks (Detroit: Wayne State University Press, 1995).
15 Hills, op. cit.


For a fuller discussion of fan video practices, see *Textual Poachers*. For a larger context on amateur media production, see Patricia R. Zimmermann, *Reel Families: A Social History of Amateur Film* (Indianapolis: Indiana University Press, 1995).


Fan Fiction on the Net, http://members.aol.com/KSNicholas/fanfic/slash.html


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Levy, p.121.

Levy, p.123.


Levy, p. 125.


Levy, p. 237.

For example, see Amy Jo Kim, Community Building on the Web: Secret Strategies for Successful Online Communities (Berkeley: Peachpit Press, 2000).

Jupiter Communication, as cited in "Just Exactly What is Viral Marketing?," http://marketsherpa.co.uk.


See, for example, Elizabeth Kolbert, "Pimps and Dragons: How an Online World Survived a Social Breakdown," New Yorker, 28 May 2001.


Personal interview, April 2001.


For elaboration on the concept of culture jamming, see also Gareth Branwyn, Jamming the Media: A Citizens Guide for Reclaiming the Tools of Communication (San Francisco: Chronicle, 1997) and David Cox, "Notes on Culture Jamming," http://www.syntac.net/hoax/manifesti/notes.php

For a useful overview of media activism in this period, see Douglas Rushkoff, Media Virus!: Hidden Agendas in Popular Culture (New York: Ballatine, 1996).


Mark Crispin Miller as cited in Dery.

Dery, op cit.

Levy, p.171 .

Levy, pp.36-37.