

# Virtual Communities and Podcasting: the emergence and transformation of public electronic space

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## ABSTRACT

In this paper, I discuss the Podcasting phenomenon within the context of other efforts to utilize the Internet as a space for social communication. Drawing upon Jürgen Habermas's work on the emergence of the "public sphere," and its transformation into a "sphere of culture consumption," I argue that a similar transformation has taken place in electronic space. Early attempts to construct virtual communities to support open communication have led to private, commercial sites that serve business objectives. A similar transformation can be traced in the development of podcasting, as amateur, volunteer efforts are overshadowed by professional, corporate content. I conclude that, in the privatized environment of the Internet, efforts to engage in open, public communication will continue to be limited as businesses develop new strategies to ensure that the digital domain supports consumption, rather than social communication.

## Keywords

Virtual community, public sphere, public space, podcasting

## 1. INTRODUCTION

Over the past quarter century, globalization, the increasing dominance of a market economy, and the rise of digital information networks have all contributed to significant changes in the use of communication technologies, and in the configuration of spaces designed for social engagement. The conception of communities as geographically-based sites for social interaction has shifted to one that places greater importance on identity and meaning. As Mark Royal and Robert Rossi have commented, "the significance of community as a territorial phenomenon has declined, while the significance of community as a relational phenomenon has grown" ([71] p 395). Barry Wellman and Milena Gulia point out that sociologists have discovered "that communities do not have to be solitary groups of densely knit neighbors but could also exist as social networks of kin, friends, and workmates who do not necessarily live in the same neighborhoods" ([82] p 169). They explain that social network analysts, unlike traditional, place-oriented community sociologists, prefer to define community in terms of social networks, rather than in terms of space.

In the early 1990s, term "Netizens" began to be used to refer to people who, in the words of Michael Hauben, who claims to have coined the term, "decide to devote time and effort into making the Net, this new part of our world, a better place." The term reflects a new, non-geographically-based social

membership that includes anyone willing to work in a voluntary, cooperative and collective fashion to create a global "electronic commons" for the benefit of the world at large [59]. This utopian vision reflects the early, optimistic period in the development of the Internet, when it was imagined to be an open public forum that provided an alternative to privately owned print media and commercial broadcast networks. The first Netizens engaged in conversations through text contributions on Usenet and bulletin board systems. Soon, sites that were designed to support virtual communities emerged.

In his 1993 account of his experiences as a participant in The WELL (Whole Earth 'Lectronic Link), one of the earliest efforts to construct a social space online, Howard Rheingold defines virtual communities as "social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" ([69] p 5). The site that Rheingold documents had a simple, text-based interface. Although most Internet-based discussions are still conducted primarily through text, increasing numbers of participants are communicating through the use of full body avatars in graphically intensive 3D chat sites, or, perhaps, through audio or video episodes that are delivered as podcasts. However, more than the mode of communication has changed over the last decade. The increasingly commercial nature of the Internet has also had a tremendous impact on how webs of relationships are formed online. I begin this paper with a review of early efforts to establish communities online. I discuss Jürgen Habermas's work that outlines how corporations transformed the "public sphere" in the pre-digital era, and I then show how the objectives and functioning of electronic sites have been similarly changed in an increasingly commercialized online environment. Turning then to the emergence of podcasting, I argue that this new way of carrying on public discussions is already under pressure from commercial interests.

## 2. EARLY ONLINE COMMUNITIES

In the course of its development, the Internet has responded to a changing set of priorities, which reflects its transformation from a government funded project that was designed to serve military objectives, to a communications project with a potential to provide a public service, to a commercially driven network under private ownership. The history of the Internet can be traced back to 1958, when the US Department of Defense Advanced Research Project Agency (ARPA) was set up in response to the Soviet's successful launch of Sputnik the year

before. As part of an effort to keep the Americans ahead of their enemies in the 1960s, ARPA created Arpanet, a computer network that was intended to support secure communication between military personal. The Arpanet continued to develop and expand, and its use eventually evolved to include non-military researchers with shared interests, who used the computer network to facilitate collaborative projects. By 1972, thousands of individuals were making use of email as a new, efficient communication tool. The National Science Foundation took over responsibility for Arpanet, and, in 1984, the Domain Name System (DNS) was introduced. In the late 1980s, the term “Internet” came into use, to describe a system of different computer networks that were connected through the use of common protocols, and the Arpanet was replaced with federally subsidized regional networks, which remained free of commercial traffic. The World Wide Web, an Internet-based platform for linking pages containing multiple media, was developed in 1990 by researchers at the European Organization for Nuclear Research (CERN), near Geneva. This development extended the ability of governments, educational institutions, non-profit organizations and individuals to provide information to the public, and to create sites to support communities of interest. However, this public service focus began to change in the early 1990s, when legislation was passed in the United States to open the Internet to commercial activity. The backbone of the network was sold to a private consortium in 1995, and one company was granted the exclusive right to sell Internet domain names ([78] p 132-38).

The first decade of online social interaction, up to about 1995, was characterized by great optimism, social and technical experimentation, and a sense that grass roots activism could lead to new kinds of community formations. Most computer-mediated social groups were based on a simple BBS (Bulletin Board System). A system operator installed inexpensive software on his or her personal computer, connected it to a telephone line via a modem, and ensured that there was enough free space on the hard drive to store archived messages. Members logged on to send and receive text using their own computer and modem, paying for their own communications charges. The prohibitive cost of long-distance calls effectively limited participation to those within the local calling area. Plain, text-based BBS interfaces ensured that the attention was focused on the content of the messages, rather than on distracting graphics. Initiated and maintained by enthusiasts and community-minded individuals, these non-profit projects facilitated communication between people around a wide variety of topics and interests.

## 2.1 The WELL

The WELL, one of the earliest and most influential bulletin board systems, was set up as a social experiment by individuals who were motivated by the ideals of 1960s student activism, had lived in intentional communities, and who shared an interest in alternative publishing. In his 1993 book documenting the first seven years of the WELL, Rheingold describes this celebrated online service as a “new kind of culture” and an “authentic community.” He believed that, if this citizen-designed, citizen-controlled network could serve as a model for larger scale projects, the public sphere could be revitalized ([69] p 2, 13-14). Although it went online in 1985, after Apple popularized graphical user interfaces, the WELL utilized a text-based system. Still, as Katie Hafner

reports in her history of the project, participants were attracted by a system that facilitated substantial and sustained discussions in an environment that valued words over images. Based on the intellectual model of French literary salons, the site was organized into several “conferences” with different discussion “topics,” each with a host, a monitor and a guide ([57] p 12-17). Although the network grew to ten thousand members at its peak, the core participants lived within a limited physical area, and regular face-to-face meetings kept the virtual community grounded in the everyday physical world ([69] p 2).

As the WELL developed, the tension between its conflicting social and economic goals became more pronounced. In considering the future of the WELL and other virtual communities, Hafner asks: “Can you build a community and a business as one and the same?” ([57] p 4). Rheingold struggles with the same question in an afterword to a revised edition of *The Virtual Community*, which was published in 2000. He reflects the developments of the previous seven years, including the sale and decline of the WELL, and his own failed efforts to reconcile the social objectives of online communities with the profit motive. Although he believes that virtual communities could be a sensible component of a business strategy, he questions how sites like AOL (America Online) and Yahoo’s GeoCities can describe themselves as communities, when they provide little more than “primitive, unsupervised, low-quality message boards.” ([70] p 340-41).

The WELL demonstrates how a strong connection between the text, individual identity, and a shared history (through shared narratives) helps to support a sense of community. The history of The WELL, as contained in the conference discussions that go back more than twenty years, remains accessible through Salon.com, the culture and politics site that purchased the online community in 1998. Members are still able to access thousands of pages of archived conversations as well as historical sections that keep the story of The WELL’s origin and evolution alive [37]. Manuel Castells underlines the importance of collective memories that result from shared histories and shared projects in the formation of nations and other communities ([50] p 29, 51). Since participants in most online communities, including those sites that are visually rich, rely on text as the primary method of communication, the strength of identity and community are largely determined by the way in which texts are written, exchanged, and archived.

## 2.2 The Amsterdam Digital City

Although The WELL still exists as a revised set discussion forms, and as archived texts that document its long history, the Amsterdam Digital City (DDS), which was founded in 1993, closed after a few promising years. The DDS offered free dial-up access, free email, and web space at no cost, emulating the American freenet model. Geert Lovink, one of the founders, reports that the objective of the group was to create an independent public space online to facilitate an “electronic town hall,” so that normal citizens could participate in shaping the new medium. The response from the public was overwhelming, and a diverse collection of online communities quickly grew within a vast, open “city”, which was organized into “squares,” “streets,” and “buildings/homes” ([65] p 42-51). Lovink reports that the result was a “gigantic alternative

and “underground” world,” that contrasted with the “official city on the surface” (p 52).

The Amsterdam Digital City had weaker geographic ties with its members than The WELL, and it quickly outgrew its local origins. Although it remained a Dutch language site, within a few years less than a quarter of the “inhabitants” of the DDS actually lived in Amsterdam. There was no employee representation on the governing board, and no long-term plan. Over time, employees who were less skilled in conflict resolution replaced experienced moderators. The experiment lacked support from local politicians, and the Amsterdam municipality and the Dutch state were unwilling to provide the ongoing funding required to maintain the project as a public service. Moreover, the lack of internal democracy within the DDS staff made the whole enterprise vulnerable to competing agendas at a time when commercialization and privatization were reshaping Internet culture. Lovink explains that, in the end, the managers of the Amsterdam Digital City were “both forced and lured to go the dotcom way” ([65] p 57). In 1999, DDS members learned that the directorate had decided to replace the non-profit foundation with a corporate model of governance, and that the community component would no longer be a priority. The doors to the “electronic town hall” were closed to the 160,000 “inhabitants” in 2000, when the public component (DDS city) was shut down, and the DDS was privatized. It was transformed into a commercial Internet Service Provider in 2001 and lost its relevance as an active social space and democratizing force ([65] p 42-67).

Reviewing the reasons for the “unhappy evolution” of the DDS, Lovink comments on the difficulty in maintaining a non-profit Internet community “within a *Zeitgeist* of the ‘absent state’ and the triumph of market liberalism” ([65] p 43). In the Netherlands and elsewhere, the digital public realm remained undefined, with no sector prepared to take responsibility for supporting non-commercial culture online. He believes that an Internet equivalent of the public broadcasting system is needed, but national telecoms everywhere were in the process of being privatized, and politicians had removed themselves from the debate. The private sector had no interest in promoting or supporting public space online, and the increasingly ‘absent state’ had abdicated its responsibility to the people whose interest it was supposed to serve. The Amsterdam Digital City, like the WELL and other early efforts, did their best to encourage social engagement, despite the lack of public institutions online to support electronic communities. As one of the original DDS designers observed, the post office and café had their online equivalent with email and chat rooms, but “how does one translate a park into Internet technology?” ([65] p 48).

### 3. THE ELECTRONIC PUBLIC SPHERE

Experiments like the WELL and the Amsterdam Digital City can be seen as attempts to create a digital version of a public sphere in cyberspace, and they illustrate the difficulties that arise when this goal comes into conflict with corporate objectives. These sites indicate that the electronic domain is subject to the same tensions between private and public interests as the offline world. In the early 1960s, Jürgen Habermas outlined the origins and development of the “public sphere,” a social institution that he traces to the salons and coffee houses of late seventeenth century Germany, England

and France. In these public forums, which were accessible to a wide variety of people, citizens could engage in rational critical discussion, and promote ideas to advance the common good. Social experiences were discussed, state affairs were debated, and ideas were publicized through the print media. However, Habermas observes that, when market forces pervaded the realm of public discourse, “the web of public communication unraveled into acts of individuated reception” and the public sphere was “transmogrified” by the mass media into a “sphere of culture consumption.” Formalized public conversations developed into a business as professional commentaries, staged debates, and organized panel discussions became consumer items. He argues that these highly administered deliberations, carried out under prearranged rules, are more likely to focus on minor personal conflicts than on politically-relevant content, and that they serve as a “tranquilizing substitute for action” ([56] p161-64). The result is a public sphere that exists in appearance only. Subsumed into the marketplace of commodities, it is controlled by, and serves, private interests.

Some observers, however, believe that the Internet still holds out possibilities for a positive transformation of the public sphere. John B. Thompson argues that radio and television created a new “non-localized, non-dialogical, open-ended space of the visible in which mediated symbolic forms can be expressed and received by a plurality of non-present others” ([80] p 245). James Slevin applies Thompson’s ideas to the Internet, arguing that it, too, facilitates new kinds of publicness that do not require participants to be co-present. However, he points out that, unlike newspapers, radio and television, the Internet is a ‘dialogical space’ that supports conversations (both synchronous and asynchronous) as well as other forms of communication. Individuals are no longer passive recipients of printed or broadcast news and views, but can publish their own opinions, encounter diverse views, and provide feedback to others ([75] p 182-6).

Yochai Benkler argues that the Internet represents an improvement over traditional, one-to-many commercial mass media, because it helps individuals to maintain existing relations with family and friends, especially those who are geographically distant, while also making it possible to form more limited relationships with others through the use of “user-centric, group-based active cooperation platforms” ([46] p 357). Although he does not believe that these distant, often temporary relationships result in electronic formations that can be described as “communities”, he celebrates the fact that networked individuals can “switch networks, cross boundaries, and weave their own web of more or less instrumental, relatively fluid relationships” while strengthening local ties (p 362). Benkler believes that, by increasing individual autonomy and control, the Internet reduces the hierarchical aspects of family relationships, enhances personal freedom, and helps individuals to form a network of supporting peers (p 357).

Wikipedia, a global, collaborative project to create an online encyclopedia, is frequently cited example of a cooperative platform, in this case one that brings people together to create a freely accessible information resource. Chris Anderson celebrates Wikipedia as “a living community rather than a static reference work,” and as a site that demonstrates the “power of peer production” ([44] p 70-71). This information

repository is one of several online resources that have been developed by the non-profit Wikimedia Foundation, which is dedicated to providing open content sites to the public free of charge. The fact that the online encyclopedia was developed by Bomis, a private company that is run by Wikipedia co-founder, Jimmy Wales, proves that business objectives can support community projects [41]. However, in other cases that Anderson cites as examples of peer production, including eBay, MySpace, and Netflix (p 119), the needs and desires of the participants are used to serve corporate, rather than community, interests. Although the technology makes it possible for individuals to extend and strengthen their social relationships, and to participate in collaborative projects that benefit the community, the overriding commercial objectives of those who own and control a site can be limiting factors.

James Bohman argues that the Internet has the potential to support a new kind of “distributive” public sphere consisting of a “public of publics” that would have democratic significance. Significantly, he believes that this would require the support of transnational public institutions that do not yet exist ([47] p 139-40). Transnational private institutions do exist, however, and, with increasing power and influence, they are in a position to limit the freedom and openness of an electronic public sphere. In order to profit from cyberspace, the privatization and commercialization of the electronic domain makes more business sense than supporting active, inclusive public forums. As Saskia Sassen observes, “powerful corporate actors and high performance networks are strengthening the role of private electronic space and altering the structure of public electronic space” ([72] p 194).

Private ownership of the Internet infrastructure and the increasing presence of commercial interest on the Web are likely to shape the character of the public sphere in cyberspace, just as they have in the offline world. In his examination of communication processes, Habermas finds that corporations use the mass media for opinion management, and he suggests that this phenomenon is key to our understanding of the transformation of the public sphere. He argues that companies hide their private business interests behind messages that seem to be motivated by a concern for the public welfare ([56] p 193-94). Noam Chomsky takes a more ideological approach. He explains that in democratic societies, where people cannot be forced to do the bidding of the ruling elite, the privately-owned national media set the agenda and shape public opinion by controlling the kinds of views that are broadcast. Propaganda is substituted for public discourse, “necessary illusions” are created to manufacture consent, and the general public is reduced to apathy (Achbar, [42] p 40-43). When private companies decided that they could profitably use the Internet to advance their corporate agenda, they were quick to discover that creating the illusion of community could form part of a successful strategy. By disguising their private cyberspaces as community projects, they could encourage private consumption in a controlled space while appearing to support public discourse in an open environment. The result is a domain that appears more public and sociable as it becomes increasingly privatized and commercial.

## 4. COMMUNITY.COM

During the first twenty-five years of its history, corporations showed no interest in the Internet, preferring to let the public sector finance the costs of the hardware and software infrastructure. Sunstein notes that the private sector turned down many offers from the American government to become involved in the development of the Internet, including an invitation to purchase the Arpanet in the 1970s, which AT&T declined. However, once the technology had been sufficiently developed, and the number of users reached a critical threshold, the electronic domain attracted the attention of corporate interests. In the early 1990s, legislation was passed in the United States to open the Internet to commercial activity ([78] p 132-34).

Dan Schiller notes that in 1992, 4 million users had access to the Internet through 5,000 not-for-profit computer systems. The introduction in 1993 of Mosaic, the first point-and-click graphical browser for the World Wide Web, facilitated a dramatic increase in the number of a Web authors and viewers. Schiller comments that the National Science Foundation’s decision in 1994 to build four National Access Points (NAPs) to connect commercial carriers to the Internet initiated an effort to “restructure the Internet on starkly neoliberal lines” ([73] p 12). He points out that, just over a year later, the Internet backbone that had been administered by the National Science Foundation was replaced by the NAP architecture, effectively commercializing the Internet ([73] p 13). In 1995, Marc Andreessen, the developer of Mosaic, described the net as “a platform for entrepreneurial activities—a free-market economy in its truest sense” ([45] p 236). Educational institutions dominated the Web during the first half of the 1990s, and electronic commerce had no presence in the top fifteen sites as late as 1996. In 1999, however, commercial sites were well represented on the list. By January 2000, the number of .com sites had grown to almost twenty-five million, far outnumbering the six million .edu sites, and the less than one million .gov sites ([78] p 117-18).

Although the profit motive may be at odds with egalitarian community objectives, utilizing the community metaphor in the design of corporate sites can be a very effective business strategy. Many positive connotations are associated with the word “community.” These include collaboration, mutual assistance, individual responsibility, a sense of belonging, volunteerism, and shared objectives. Corporations hope that, by incorporating “community” into their branding, they will be able to leverage these positive associations for the benefit of the bottom line. Ulrike Schultze and Wanda Orlikowski’s study of the literature on virtual organisations reveals that the community metaphor is often used to characterize online groups as being more trusting and cooperative than their place-based equivalents. The use of the word “community” suggests a grass roots, neighbourly form of governance, rather than a top-down, command-and-control model. It highlights the importance of personal responsibility within a group of equals, and it encourages all members to believe that their contributions are not only welcome, but also necessary ([74] p 45-77). The community metaphor can be used to characterize a genuinely cooperative, self-governing group of individuals with shared objectives. It can also be successfully employed to manipulate people into volunteering for a so-called “community” project, that is, in reality, privately owned, and

subject to external management. Through the clever use of language, images and processes, it can encourage a set of behaviours associated with a co-operative form of governance, while, at the same time, obscuring the control from above that continues to operate.

A 1997 manifesto by John Hagel and Arthur Armstrong, Net Gain: Expanding Markets through Virtual Communities, explains how existing businesses can profit from incorporating a community component into corporate sites, and it describes how new businesses can be designed around the community model. The authors reflect on the influence of the WELL, and note that online services, including Prodigy, America Online, and Compuserve, soon learned to make use of the bulletin boards and chat facilities to attract and hold more members. In working with their clients from a broad range of industries, the authors discovered that

the key to exploiting the new market opportunity in on-line networks was through combining content and communication. Virtual communities provided a powerful context for this integration and were therefore more than just an interesting social phenomenon. In fact, they were the kernel of a fundamentally new business model ([58] p x).

Virtual communities can effectively boost company profits, they explain, by aggregating interested individuals, providing “community organizers” who reduce the “perceived risk” of making purchases, and by enhancing the ability to target members by accumulating transaction histories and preferences. Furthermore, like other e-commerce initiatives, they extend the customer base without geographical constraints, and save money that does not have to be spent on bricks and mortar ([58] p 10-12). The authors predict that what will begin as a set of highly fragmented but profitable businesses will evolve into collections of core communities with affiliate relationships, and, finally, to “cosmic coalitions” in the inevitable development towards concentration ([58] p 83-86). A successful virtual community business is one that provides a transaction environment that attracts a large number of interested members, who are then turned into active customers. “What is really at issue,” stress Hagel and Armstrong, is “who will own the customer,” and who will extract value from the user profiles and usage records that are collected in these online commercial spaces ([58] p 109).

Net Gain was written for senior managers of large companies who wanted to create more effective customer relationships, and who were in a position to take advantage of the liberalization and deregulation of trade. Their goal, the authors say, is not to interpret the new world that virtual communities have opened up, but “to help change it.” ([58] p xi). The strategy is to subvert the idea of an online community so that its members learn to trust, and become committed to, a private company, rather than to one another.

Before the end of 1997, the New York Times observed that “community” had become the latest Web marketing buzzword. An increasing number of corporations were adding “community-enabling systems” to their sites as part of a strategy to attract “not just traffic but loyal, repeat traffic—just the kind of visitor that most appeals to advertisers and online retailers” [79]. In 1998 the Yahoo search site opened a “Clubs” area and their rival, Excite,

launched a “Community” section. Offering Web page hosting as well as access to bulletin boards, both invited users to join existing discussion groups and to create new ones. The financial success of community-themed TheGlobe.com led to the development of similar sites, including eGroups, Neighborhood Link, and AT&T’s Community Port, all of which focused exclusively on the notion of community to attract and keep as many Web surfers as possible. For individuals interested in socializing, these sites offered safe, structured spaces to discuss topics of common interest. For advertisers, these highly focused groups supplied “ready-made target audiences.” Because they offered something to both the advertiser and the audience, Excite’s product manager for their communities initiative believed that these online communities of interest would be among the most popular sites on the Web [66].

Stacey Bressler and Charles Grantham, the authors of Communities of Commerce, note that belonging to a community meets some basic psychological needs. The application of traditional elements of community, especially collaboration and involvement, to customer relations makes members into active purchasers and encourages them to promote products through their interactions with other members. Communities of commerce satisfy the need for a “comfortable environment” in “[t]imes of extreme change and rapid growth” by establishing a psychological connection between customers and suppliers through controlled “patterns of interaction” ([49] p 38). Bressler and Grantham quote Rheingold’s definition of virtual communities and highlight the importance of forming “webs of personal relationships in cyberspace.” In the business context, however, this means that companies need to “really get to know their customers” so that they can be sold “customized goods and services in a cost-effective way” ([49] p 163).

In her handbook, Community Building on the Web, Amy Jo Kim presents a set of guidelines developed to ensure a successful commercial site, including the importance of member profiles, leaders, rules, events and rituals. She advises that designers make two lists at the planning stage: one of members’ needs and one of the owners’ goals. If any conflicts arise when the two lists are consolidated, she suggests that they can be resolved by adjusting either the member profile or the business plan. Still, the inevitability of competing objectives is apparent in her recommendation that two different missions statements are needed. One, for the designers, programmers, marketers and managers, is for internal consumption and highlights the owners’ desire for a return on their investment. The other, which is “intended for public viewing,” reflects the perceived needs of potential community members, and may include a catchy tagline that contributes to “developing your brand personality” ([62] p 9-25).

For the authors of Net Gain, Communities of Commerce, Community Building on the Web, and a host of similar titles, there is no question about whether a community and a business can be built as one and the same. Having replaced social objectives with business goals, the contradiction no longer exists. Rather than creating an open forum where individuals are free to associate with others and form meaningful social groups, virtual communities are reduced to highly controlled spaces that facilitate focused commercial

relationships within private online environments. The idea of a community of citizens is reduced to a necessary illusion that ensures the participation of compliant and motivated consumers. Community, and all of the positive associations that the word carries, contributes to the “brand personality” of commercial sites in the hope that a social component, however limited, will give them an edge in an increasingly competitive market. Naomi Klein observes that companies create powerful corporate mythologies in order to infuse ordinary commodities with special meaning. She argues that mythmaking becomes the central objective and the product is reduced as nothing more than a marketing tool for the brand. Klein suggests that online corporate giants, like Amazon.com, create the purest brands. Free from the constraints of physical stores and the burden of manufacturing, these brands are “free to soar, less as the disseminators of goods and services than as collective hallucinations” ([63] p 22).

#### 4.1 Amazon.com

Although Amazon.com was launched as an online book retailer in 1995, it now strives to be “[e]arth’s most customer-centric company where people can find and discover virtually anything they want to buy online”. Although it is based in the U.S.A., the company operates customized sites for six other countries and has 20 fulfillment centers around the world [5]. In the second quarter of 2006, net sales for the online retailer reached US\$2.14 billion, an increase of 22% over the second quarter of 2005 [3]. As well as providing a huge range of goods, the retailer attracts and keeps loyal customers by creating a sense of belonging. As part of a welcoming ritual, registered users are greeted by name and are invited to examine a list of recommended items, which is generated automatically based on items previously viewed or purchased. Newcomers are encouraged to create a personal profile and a list of their most desired objects, which results in more recommendations and targeted specials [7].

To be part of the Amazon.com social scene, one has to buy-in. Participants establish their identity and reputation in this environment through making purchases, posting reviews, and creating shared lists of books on particular topics. Customers are invited to build a community of consumers by creating a personal profile that displays their birthday and wish lists (including baby and wedding registries), and shows their product reviews and purchasing history. Shoppers are provided with networking tools that allow them to provide their “Amazon Friends” with “quick access to interesting products you want to share with them” [6]. Individuals are encouraged to share wish lists, recommendations, reviews, and records of purchases (with personal ratings and comments), with friends, other Amazon shoppers and preferred reviewers. Members can also visit and join “Purchase Circles” that are automatically assembled by aggregating sales information into groups based on where members live, work, or attend school [4]. Since these circles are anonymous collections of purchasing activity, any feeling of belonging is limited to similarities in buying patterns and wish lists.

Other relationships are established using a “collaborative filtering” algorithm that connects members to other shoppers with similar buying habits, and calls attention to their purchases (although not to their personal information). Kim praises their use of this invisible filtering technique, and

believes that the ability of members to see their complete purchasing history and to compare their purchases and wish lists with those made by other customers “adds to members’ overall feeling of control over their data” ([62] p 94). However, control over one’s purchasing history and the ability to compare lists is no compensation for the absence of control over the establishment of social connections. Direct communication between individuals might detract attention from the products on display. In this commercial space, any information that might lead to a purchase can be shared. What cannot be shared, according to the guidelines, includes personal contact details or a Web address that directs a shopper outside the virtual mall.

For devoted shoppers, there is little reason to leave this bright, safe, hermetically sealed community of consumers. Those who feel that they need a break from shopping can always visit the Amazon Fishbowl, which screens performances from comics, musicians, and other entertainers. Of course, songs, films, and books that are featured are all available for purchase from Amazon.com.

#### 4.2 eBay.com

eBay.com, founded 1995, is another high profile e-commerce site that utilizes the community metaphor to add a social dimension to their brand. The mission statement of eBay, “The World’s Online Marketplace,” is “to provide a global trading platform where practically anyone can trade practically anything” [20]. It is also a “community” guided by “fundamental values” that encourage buyers and sellers to be honest, open, and trusting in their dealings with one another [17]. Promoting the idea that people can be trusted serves the business strategy, which is to earn a percentage of the value of everything that is sold through the site.

In October, 2004, eBay launched a television and print advertising campaign with the slogan “The Power of All of Us,” which, makes the point that “people are inherently good,” and that “eBay is about trust and enabling people to connect over shared interests and passions.” As Diane Forese, the VP of Consumer Marketing, explained, rather than using eBay’s corporate voice they “wanted to hold a mirror up that would reflect and celebrate the Community” [36]. The first ad features people greeting one another and doing good deeds against a background of ordinary main street shops and residences. In eBay, however, people exchange commodities, not pleasantries, and the company profits from every transaction. In the third quarter of 2004, eBay reported that their 224,000 virtual stores worldwide earned net revenues of US\$805.9 million, and gross profits of US\$648.8 million. During the previous 12-month period, 51.7 million registered users bid, bought, listed or sold an item on eBay [18]. By the third quarter of 2006 net revenue had risen to US\$1.449 billion and eBay was promoting itself as a pioneer in creating “communities built on commerce, sustained by trust, and inspired by opportunity” [19].

Ironically, the images from ordinary main-street America in these ads evoke nostalgia for public social spaces that electronic commerce effectively eliminates. Private sites replace civic spaces, brands replace buildings, and the profit motive replaces civic responsibility. The eBay community newsletter, “The News Chatter,” is designed to look like any local neighborhood publication. However, this friendly

bulletin supports commerce as the sole purpose of community. It provides information about marketplace safety, tips on building and promoting your own brand, and articles about mentoring and teaching “the eBay way” [16]. In a logical extension of the enclosed shopping mall, eBay simulates social spaces and practices that are disappearing from physical space and are rarely encountered online. Perhaps eBay, like many other privately owned and controlled environments, whether screen based or physical, provides images and narratives that refer to more egalitarian spaces and practices in order to appeal to customers’ longing for what the believe has been lost. In any case, these are consumed along with whatever products and services the site is designed to sell.

The trust, honesty, and loyalty that eBay believes is the source of their business success, are components of what is often referred to as ‘social capital’. New Zealand economist Tim Hazledine argues that varied interactions between people within cultural and geographically-situated communities (including neighbourhoods, town and countries) foster relationships that are characterized by empathy and sympathy for others. These invisible ties hold a society together and are crucial to the effective functioning of government institutions and the economy. Capitalism works best, he believes, when businesses are adjusted to suit the scale of the economic environment in which they are located, and “take account of the wider interests of the communities in which they operate.” He warns that social capital is a precious resource that can be depleted, if healthy communities and the network of human relationships that they support are not maintained [60]. eBay, a global forum that facilitates a limited range of commercial interactions between strangers, relies on a continuing supply of social capital that it cannot help to replenish. Although the site draws heavily on the idea of community, it is reduced to little more than a branding campaign that is expressed through comforting catch phrases, nostalgic images, and reassuring dramatizations.

### 4.3 Web 2.0: People as content

In the print and broadcast media, the New Year typically begins with a review of the year that has passed. Columnists and opinion makers in every field report on what they believe to be the most important events of the past twelve months, and they prophesize about how things might develop in the year ahead. In the process of selecting, discussing, and passing judgment on a limited number of incidents in their summaries, journalists help to shape our collective memory of the recent past, and they help to set our expectations for the near future. In the fast moving area of digital media, business, technology, and cultural commentators provide narratives that attempt to map where we are and where we might be going. On two consecutive days in early January 2006, my local newspaper (the Otago Daily Times) reprinted two articles from The Observer that assessed the current state of the Internet and pointed to possible future developments. These well promoted and lavishly illustrated three-page feature articles provided the kind of sweeping overview that we have come to expect from such reviews. However, in the examples that they chose, and in the language that they used to discuss them, the authors also unintentionally highlighted a tension that exists between the business interests of the companies behind the selected Web sites, and social desires of the individuals who use them.

The first article, “Websites that changed the world,” which promises a profile of “the most influential websites to date,” opens with a large photograph that shows the World Wide Web (represented by its three letter acronym) in the palm of a hand, suggesting that it is the individual user who is in control of this digital communication space ([67] p 15). To celebrate the 15<sup>th</sup> anniversary of the World Wide Web, the author, John Naughton, compiled a list of 15 sites that, he states, “have become the virtual wallpaper of our lives” (p 18). All of the high profile sites have succeeded in attracting a large number of subscribers or viewers. The list included the established auction site, eBay.com, and the online mega mall, amazon.com, as well as salon.com and yahoo.com, which have become established media companies. However, the majority of the selected sites illustrate the increasing popularity of the Web as a space for self-publishing and information sharing. Wikipedia.com, the online encyclopedia, demonstrates how collaborative authoring and editing can result in a useful resource, and craigslist.org shows how a “centralized network of online urban communities” can develop from a site that is devoted to free discussion forums and classified advertisements. Alternative news sites are represented by the drudgereport.com and by slashdot.com, a technology forum and news site that “pioneered user-driven content” (p 19). User-provided content also propelled two other sites on the list to quick prominence. The author reports that visitors watch more than 100 million video clips a day on youtube.com, and that myspace.com, a social networking site built around music sharing, had attracted 100 million users. Blogger.com made the list because it made electronic self-publishing as easy as word processing. The comments that the author makes about this site reflect our shifting relationship to the Web. “Content was once made by companies for passive consumption by people,” Naughton writes, but “[a]fter Blogger, people were the content” (p 19).

In the second article, “Where to next for the web?,” David Smith interviews Silicon Valley entrepreneurs to find out what might be “The Next Big Thing” after MySpace and Youtube, which are still relatively recent phenomena. He reports that the Valley is booming again, and that everyone has a business plan. He comments that “the idea of the moment” is “web 2.0”, a term with no clear meaning that has something to do with “social networks and content generated by users.” The opening phase of the Web was “about information,” Smith writes, but now, “it’s about community”. “A whole new world wide web is on the horizon,” he predicts, as startup companies develop new ways of enabling passive consumers to become active creators of online content and experiences ([76] p 36-37). He observes that a global army of volunteer contributors is more able to provide content that is tailored to individual needs and desires than any conventional media organization. People create, and have become, the content. Now, the race is on to “turn it into a commercial proposition” (p 36). The author reports that about half of the venture capital in America is concentrated in Silicon Valley, and that venture capitalists raised US\$455 million for Web 2.0 companies in the first three-quarters of 2006. Google’s purchase of YouTube for US\$1.65 billion based on viewer numbers, not revenue, has “concentrated minds” on the Web 2.0’s potential. Now that users are able to gather together to form communities and to share content, the objective is to find ways to extract

commercial value from the resulting user traffic through online advertising or other means (p 38).

The term “Web 2.0” was coined by O’Reilly Media, and popularized by their annual Web 2.0 conferences, which they have run since 2004. In a 2005 article that explains what Web 2.0 means, Tim O’Reilly suggests that the bursting of the dot-com bubble in 2001 ushered in a new phase in the development of the Internet. He argues that businesses that survived the shakeout, and successful new entrants, exhibit a set of core competencies that identify them as progressive Web 2.0 companies. Significantly, these include the ability to harness the collective intelligence of users, who are treated as co-developers of services that become richer as more people use them. O’Reilly advises that companies “seek to own” the “unique, hard-to-recreate source of data” that can be created and collected through the use of these services. He points out that “[t]he key to competitive advantage in internet applications is the extent to which users add their own data to that which you provide.” However, since a minority of users will go the trouble of “adding value” to an application, companies should “[s]et inclusive defaults for aggregating user data as a side-effect of their use of the application” [68].

In an interview that was podcast in 2006, Tim Berners-Lee, the originator of the World Wide Web and the director of the World Wide Web Consortium, was asked whether “Web 1.0 was about connecting computers and making information available; and Web 2 is about connecting people and facilitating new kinds of collaboration”. Berners-Lee responded that Web 2.0 was just “a piece of jargon” that had no agreed upon meaning, and that, although blogs and wikis have made it easier for individuals to contribute content, the World Wide Web was always about communication in “a collaborative space where people can interact.” He expressed hope that this communication technology would enable people to form a social web of individuals that would pull the world together so that the huge challenges that are facing humanity could be addressed [14].

Clearly, the ability of users to contribute content and to participate in collaborative projects online has increased as a result of the efforts of Internet companies that have been making the news in recent years, including those that were highlighted in the newspaper articles that I discussed above. However, as O’Reilly’s explanation makes clear, enabling users to build communities of interest around content that they have created is the means, rather than the end. In the privatized environment of the Internet, the objectives are commercial, not social. Although the term suggests a new, second generation Internet, Web 2.0 is better described as a business strategy that aims to cash in on the desire of individuals to engage with others through communication and creative contributions.

## 5. PODCASTING: THE EMERGENCE OF A NEW COMMUNICATION SPACE

Youtube.com, myspace.com, and a handful of other Web sites that rely almost entirely on user-generated content have received a lot of attention the popular press recently. As sites that enable users to communicate easily with other users, and as businesses that have sold for incredible sums (Google bought youtube.com for US\$1.6 billion in 2006 [22], and

News Corp. purchased InterMix Media, the owner of myspace.com for US\$580 million in 2005 [25]), they exemplify the kind of Web.2.0 company that Tim O’Reilly argues will flourish in the future. Because the activities of both of these companies are focused on specific Web sites, it is possible for the owners to leverage the attention of large numbers of people, and to aggregating the user data that results from their activity on the sites. It is more difficult to extract commercial value from uncontrolled communication practices that are dispersed throughout the Internet. However, as users take up emerging communications technologies in large enough numbers, we can expect businesses to recognize new potential markets, and to develop inventive ways of exploiting them, just as they have with online communities. The short history of podcasting provides us with a recent example of how new social communication practices can be quickly captured and controlled by commercial interests.

The term “podcasting” was popularized by Adam Curry, who built on the work of programmer Dave Winer to create a simple software application to automate the process of downloading audio files and syncing them to Apple’s iPods [40]. As Winer reported in October 2000, Curry wanted the Internet to be “[e]veryman’s broadcast medium, to route around TV and radio broadcast networks, with no compromise in quality” [84]. By devising a method of downloading and archiving digital audio and video in the background, rather than streaming them in real time, large files could be accessed and played without requiring a broadband Internet connection. “What’s different about this system”, Winer explained in another posting a few months later, “is that you subscribe to channels instead of clicking-and-waiting.” He explains that, by adding an enclosure sub-element to an RRS (Really Simple Syndication) element, it is possible for an individual to publish, and for others to subscribe to, audio and video files as well as any other file format. He points out that, significantly, “[t]here is no central authority, no spectrum to allocate, it’s open to amateurs, like the Internet itself” [83]. In 2003, Curry made a script available on his blog that facilitated the transfer of RRS feeds to iPods via Apple’s iTunes music software [52], and in 2004, a free cross-platform podcast receiver with a user interface, “iPodder” was released and was widely used [23]. In 2005 the editors of the New Oxford American Dictionary chose ‘podcast’ as the Word of the Year, which they define as “a digital recording of a radio broadcast or similar program, made available on the Internet for downloading to a personal audio player” [30].

In early 2005, USA TODAY’s Byron Acohido reported that “[I]ike the blogging phenomenon, podcasts have come out of nowhere to attract an enthusiastic grassroots following”. He quotes a Cambridge University student, Michael Rundle, who began a regular podcast featuring his original music. “What we’re trying to accomplish is a music democracy,” says Rundle. “There are no boundaries and no restrictions, and we are only limited by our own ingenuity and pool of talent”. Jake Lundington, a producer of a podcast about technology topics, commented that “[t]his is peer-to-peer computing at an organic level unlike anything we’ve ever seen” [43]. Acohido notes that a popular podcasting directory listed 3,300 programmes on a wide variety of topics. USA TODAY describes The Dawn and Drew Show, a home-made effort by a husband and wife team that ranked as the most popular of these early

podcasts, as an entertaining example of “a new breed of free amateur chatfests available at an Internet connection near you.” Adam Curry comments that “Dawn and Drew are the new reality programming, two normal people communicating naturally, no scripts, no planning” [43].

As a communication practice, podcasting is similar in many respects to early efforts to create a space for public discourse in the electronic domain. It depends on individual volunteers who were prepared to experiment with new software tools, and there is a collaborative sharing of tips and techniques. The use of free software and inexpensive hardware results in a homespun, low-tech aesthetic. Just as blogging has allowed people with minimal technical skills to become citizen journalist in the medium of text, podcasting offers the possibility for individuals to assemble and publish programmes that enable them to speak, to converse, to exchange views, and enter into arguments using audio and visual media. Like the text postings on The WELL, podcast episodes can be long, and because they are archived by the software that is used to receive them (and often at the server end, and on web sites as well), files can be accessed long after they have been published. The resulting history of conversations encourages a sense of community to develop around a podcast over time. The subscription feature of syndication feeds facilitates ongoing conversations, and the development of communities of interest based on extended shared experiences.

As well as containing interviews and panel discussions, many podcasts comment on, or respond to, other podcasts, creating a network of conversations across the podosphere, and providing support for the growing community of practitioners and listeners. Listeners of these podcasts are referred to related Websites, where supporting material can be found, and comments to the producers can be posted. This knits the podcasts into the screen-based fabric of the Web. PodcastPickle.com, a podcast directory site that launched in March, 2005, provides news, information, discussion forums, technical tips, and reviews, as well as a listing of more than 12,500 podcasts that are rated, and organized by category [29]. The weekly, Podcast Pickle Show, which began in June 2005, includes promotions for selected podcasts, and audio recordings of monthly Podcast Pickle Parties, which take place in the Pickle Chatroom online [35]. Since December 2004, the podcast411 podcast has delivered more than an episode a week. In each show, the host, known simply as Rob, interviews other podcasters about their programmes, the podcasts that they listen to, and the hardware and software that they use. The podcast411 website provides access to all of the episodes, tutorials, discussion forums, news, information, and useful links [28].

As community-minded individuals, podcasters invite comments and contributions from their listeners and often incorporate them into their programmes. A creative example of this practice is the Modulation podcast, which was launched in 2004 by Tomoyuki Sugimoto, a 27-year-old Japanese musician. Sugimoto invites listeners to record themselves saying the word “modulation,” and to send these recordings to him as an email attachment. He then integrates these utterances, each an example of a different national accent, into his podcasts. The audio episodes (46 by early 2007) are personal, and local. Sugimoto combines listener

contributions, his own and other voices, environmental sounds, and urban noise into electro acoustic compositions. These works-in-progress invite the listener to follow, and provide feedback on, his creative process. He often begins with a short, mundane sound (a ringing phone, a mosquito, or a cough), which he samples, manipulates, and develops into a musical experiment. In every episode, he invites listeners to visit his website, which contains more examples of his work as well as personal information and a link to his page on Myspace.com [77].

As a non-commercial practice that is open to voices that would not otherwise be heard, the content in this media space is very different from what is available from corporate, broadcast media (although, as I will discuss, this is changing). Podcasts that focus on media, the news, and public affairs are numerous and popular. No One’s Listening is one of many examples of regular podcasts about media literacy and education. Dedicated to deconstructing the media, the host, Irene McGee, has interviewed Noam Chomsky, Lawrence Lessig, Jello Biafra and other media critics. Recent topics have included video news releases, the Center for Media and Democracy, the World Technology Summit, blogging, money and the media, and new media etiquette. All episodes are archived on a Website that includes news and an active blog [26]. Although North America is well represented in the podosphere, voices from places that are rarely covered by the commercial media can also be found. The SWRadioAfrica podcast allows listeners around the world to hear this award-winning, independent, short wave radio programme, which was broadcast from within Zimbabwe until the government barred it from the airwaves. Zimbabwean expatriates now produce the popular show, which features three hours of music, news, and calls from listeners, in Britain [34]. AfricaFiles: The Pulse, which is produced by “a network of volunteers committed to the promotion of human rights, economic justice, African perspectives and alternative analysis” also provides unfiltered, uncensored news from the African continent [2].

Podcasting has also extended the reach of alternative broadcasts that aim to counter the entertaining sound bites of commercial media by feature in-depth interviews and features that deal with politics, immigration, race and gender issues, protests, and activist news. The Uprising podcast extends the reach of Uprising Radio, a hard hitting one hour show that originates in Los Angeles [39]. This is Hell, is a four hour, unedited podcast of a radio show that is recorded live in Cary’s Lounge in Chicago’s West Rogers Park neighborhood, where the producers have been “manufacturing dissent” every Saturday morning since 1998. Known for their long interviews, the show is described as “independent of “Independent Media”” and as an “alternative to “Alternative Media”” [38]. Democracy Now!, a large, independent public media collaboration based in New York City, uses their daily hour-long audio and video podcasts to reach listeners outside of North America [13]. Podcasting has also proven to be an effective alternative when traditional broadcasting is silenced. During an eight-week management lockout of Canadian Broadcasting Corporation workers, which began on 15 August 2005, the public network was effectively shut down. However, CBC radio and television personalities could still be heard by downloading the CBC Unplugged podcast, which provided lockout-related information, interviews, and current news [10].

As Vancouver-based journalist, Peter Tupper, commented in his coverage of the initiative:

Labour disputes usually involve workers separated from the means of production. In the information economy, the means of production is the same as the workers, who take their names and their skills with them when they strike or are locked out. Digital technologies like mini-disc recorders, personal computers and the Internet make it possible to create and distribute media to the world for next to nothing [81].

### 5.1 Extracting value from the podosphere

Over the past few years, mainstream media soon followed their audience as it shifted to this growing communication space. Large institutional voices, both public and private, began to compete with individual, grass roots podcasts. National public broadcasters turned many of their broadcasts into podcasts, and they created new content especially suited to the new medium. The BBC announced their entry into the podcasting arena in May 2005 [8], and they were followed by America's NPR [27], Canada's CBC [9], Australia's ABC [1], Radio New Zealand [33], and others. Rather than replacing existing traditional radio, their podcasts served to promote and strengthen the public broadcasting sector. However, as commercial media companies, such as CNN [12], Fox News [21], Disney [15], and CBS [11] extended their reach into the podosphere, this evolving communication environment soon resembled traditional media spaces. With higher production values, large marketing budgets, and multiple media channels to promote their programmes, corporate media is in a much stronger position than alternative producers to attract attention to their sites, and to their content.

Many technology commentators have no difficulty accepting the increasingly commercial nature of the podcasting environment. Writing for O'Reilly Digital Media, Scott Bourne believes that much could be learned from the commercial radio business. "Advertising-supported models still work," he writes, and since everyone will be competing for audience and revenue, podcasters should "study radio's creative, technical and business elements and borrow what works" [48]. Adam Curry was well known for his work as a video jockey for MTV music video channel before hosting his own Podfinder podcast as the self-proclaimed "Podfather" [32]. He now hopes to make money from his own podcasting venture, PodShow Inc., a podcast promotions and advertising company [31]. At the beginning of 2007, he predicted that podcasting would become an increasingly commercial activity:

Members of online Podcasting 'Communities' will come to realize that a community of Podcasters is about as silly as a community of Broadcasters, and will split into three main factions: Podcasting For Profit, Podcasting for Dummies and Podcasting to Save The World and Win Valuable Cash Prizes [51].

Ron Bloom, the CEO of PodShow Inc., explains that, by turning advertisement into content, they are able to produce podcasts that are useful and entertaining for the audience, and effective for the advertiser. "Normally," he says, "when an advertiser wants to get a message out, it'll record a spokesperson, and it will get that recording out to many

outlets". However, "[i]n Advertising 2.0, the host of the show will use their own sensibilities about their audience to communicate the message of the brand". For one client, Bloom had PodShow hosts incorporate a product into 50 different podcasts, with each host interpreting the brand in their own entertaining way. "The trick," says Bloom, "is to value the relationship between the show and audience and find the right brand." The hosts included different product promotion codes in their shows, which enabled the client to track which ads the viewers responded to [55]. In early 2007, *BusinessWeek.com* announced that Podcasts would be the next big ad medium. The article noted that advertisers spent US\$80 million on podcasts in 2006, a figure that was predicted to rise to US\$400 million by 2011. The reporter comments that, as a medium that reaches highly targeted audiences, advertisers believe that video podcasting may be more effective than television in reaching niche markets [61].

When examining the degree to which podcasting and other forms of digital communication are vulnerable to private control and commercial exploitation, we have to think about more than just the content of individual episodes, postings, and programmes. Lawrence Lessig suggests that in the consideration of the ownership, regulation and governance of the digital domain we must take into account three distinct layers. A "physical" layer, at the bottom, consists of the computers and wires that carry Internet communications (and, we could add, the portable media players that can be used to listen to and watch podcasts). In the middle, a "logical" or "code" layer includes the Internet protocols, operating systems, and other software required to connect to the network and access information. At the top sits a "content" layer, which includes the text, images, music, animations, movies and other digital material accessed over the network. In principle, each of these layers could be unrestricted, or they could be privately owned and controlled ([64] p 23). Free content could be available over a privately owned network and a freely accessible public network could offer pay-per-view services. With different permutations and combinations, some forms of control may be less visible or completely hidden. Most studies of Internet applications and Web sites focus almost exclusively on what happens at the content layer, without reference to ownership and control issues at other layers. With podcasting, a significant part of the process takes place at the middle layer, where the software that is used to find and receive the content resides.

### 5.2 iTunes: Mixing commerce and conversation

Individuals search, sort, play, and archive audio and video podcasts using a software program called an aggregator. When Apple added a podcast directory to its iTunes music software, the program became a popular aggregator, and users were exposed to the products that are available through the iTunes Store. In early 2005, USA TODAY reported that Apple showed little interest in fostering the delivery of "grass-roots digital content," even though they had sold 10 million iPods. The newspaper quoted Adam Curry, who commented that "Apple has probably sold their soul to Hollywood and just cannot integrate podcasting into their business plan" [43]. However, in June 2005, Apple integrated podcasting into version 4.9 of iTunes, which is distributed with the Mac OS operating system

and with Apple's iLife suite of applications, and is available as a free download from Apple's Website. By enabling users to search, download, subscribe to, and organize podcasts on PCs running Windows 2000 and Windows XP, as well as on Apple Macintosh computers, iTunes replaced the need for a separate podcast aggregator. Within two days, iTunes users had subscribed to over one million podcasts [24]. The Podcast feature allowed users to search for the free content in an area of iTunes that was separate from the iTunes Store. Significantly, this changed with the release of iTunes 7 in 2006, when podcasts were moved into the Store, absorbing these public conversations into an environment devoted to commercial transactions.

In January 2007, Apple announced that users had used iTunes to purchase and download 1.3 million feature-length films, 50 million television episodes, and more than two billion songs, making the iTunes Store the largest online store for popular music and video [53]. At that time, Apple's iPods had a 62 per cent share of the portable music player market [54]. By requiring individuals to use iTunes to transfer podcasts to their iPod, they ensure that they will be exposed to the increasing amount of commercial content that is available through the Store, which includes over four million songs, 250 feature films, and 350 television programs [53]. To find one of the 100,000 free podcasts in the directory, users have to search the entire iTunes Store, so it is very likely that the podcast will be buried in a long list of search results that will include mostly commercial media. A search for "Modulation," for example, brings up a list of 72 items, all but four of which are songs and albums that are available for purchase. Sugimoto's Modulation podcast is listed as item number 32.

By browsing through the iTunes Store, individuals are exposed to a wide array of media for sale. Featured content is laid out in windows labeled "New Releases," "What's Hot," "Just Added," and "Exclusively on iTunes." Flanking these, are lists that provide a selection of "Top Songs," "Top Albums," and "Top Music Videos," as well as music genres and a selection of "Top Audiobooks." Window shoppers who scroll down will see a list of "Top Podcasts" in the bottom left corner. A listing of the Store content in the upper left corner also includes a "Podcasts" link, which reveals a selection of featured audio and video podcasts. The iTunes aggregator extracts value from the archive of conversations and packaged experiences by creating lists, controlling visibility, gathering content into narrow categories, making recommendations, and providing links to other controlled, commercial spaces. Clearly, Apple has worked out how to integrate podcasting into their business plan. By bringing conversations and commercial content together in the same place, public communication serves commerce in the iTunes Store, just as it does in Amazon.com and eBay.com.

## 6. CONCLUSION

The history of virtual communities shows how early efforts to utilize the Internet as a space for social engagement and community building have been limited by the lack of public ownership and public institutions. As the online environment evolved into a predominately commercial space, the possibility that citizens of the digital domain could create a public sphere in cyberspace was diminished. Amazon.com, eBay.com and the iTunes Store illustrate how corporations

successfully combine social contact and commercial content in order to increase consumption. In these private, online malls, communication can be focused and controlled so that it can serve business objectives. The emergence of podcasting as a new communications medium is one recent example of ongoing efforts on the part of civic-minded individuals to use the digital domain for the benefit of the public. New, innovative strategies developed by corporations to manipulate and control electronic space indicate that these community efforts will continue to be countered by private interests.

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