



New Media Cultures

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The internet: the multimedia-accessible universe and the user

More than any other new media technology, the internet has represented the idea of change and newness within contemporary culture. A whole new vernacular has developed from its myriad forms that underline its pervasive influence and its normalization in our lives. The idea of a computer virus has taken on equivalent status to a flu epidemic in terms of warnings, types of inoculation and preventative care and the dire consequences of infection. Spam, formerly a luncheon meat, is now understood as junk email. Brand names such as eBay or Amazon, which were non-existent in the early 1990s, now represent types of buying and selling via the World Wide Web engaged in by millions. Perhaps the most interesting neologism to emerge from the web in the last five years is the verb 'to google'. Google, the most popular of search engines to tour the vast terrain of the web, has become a shorthand abbreviation for doing a web search for some particular fact. People 'google' other people to find out how they are represented via the web in a new variation on the game of six degrees of separation.

Despite this familiarization with the various practices that have developed through the internet, as a cultural form it is difficult to analyse because of its ubiquity. As touched on in chapter one, the internet has effectively remediated many forms of communication under its rather large umbrella of activities. Although letter-writing has continued, email has to be seen as replacing some of that practice and has sped up its delivery. Instant messaging, with its whole range of communication abbreviations and emoticons, represents something between real-time dialogue, conversation through text and something approaching telephone conversations. Many web pages are designed in the tradition of magazines. Others, such as *atomfilms.com*, provide the opportunity to screen short films. Still others are designed to showcase musical talent or the latest sports results via audio or video files or both. Layered over many of these sites are pop-up advertisements. Indeed, even simple internet games involve multi-tasking: while playing, one is usually invited to engage in chat with one's opponent.

As opposed to being a simple media form, the internet represents the tendency that we see in many new media: it is a multimedia form. Because of this quality, the internet also embodies the cultural and an industry imaginary around a converged media form. In previous eras of media use, the isolation of particular functions produced the cultural form and ultimately the cultural practice. Thus a phone, in its simplicity of emphasizing

networking oral communication over distance, achieved pre-eminence. Still cameras were designed exclusively for the reproduction of the image as photograph. To a degree, technologies such as television and film are combinatory in their capacities through their matching of elaborate and multilayered soundtracks with moving images, and thus represent the origins of multimedia. What distinguishes the internet from these quite elaborate precursors are two fundamentally different technological structures.

First, as its name suggests, the internet is more than anything else a network of networks interlaced and augmented via the intricate network of telephone cables and more recently cable television lines. Much like the phone system, the internet is a carrier of content, but does not determine the nature of that content. Attempts to regulate internet content by various government organizations from Singapore and Australia to the overruled American Communication Decency Act 1996, have struggled precisely because it is simply a network of connections and nothing more.

Second, the internet can handle the movement of massive amounts of information in many different directions simultaneously through packet switching. Packet switching was originally developed to maximize the use of the old supercomputers through timesharing: because the computing time of any given user's job would be relatively minor for these mainframes, it was possible for people to feel as if they were all working at the same time at their respective connected terminals while only paying for seconds of computation (Gere, 2002: 67–8). Similarly, it is possible for many people to be on the same website at the same time. Information is bundled in smaller digitally structured packets that are reassembled on each computer into the text, images and graphics in pieces that download. This means that there is a sharing of the lines: as one packet is downloading on to a given computer, another packet is uploading. The effect of this movement and use of the network is that, in some forms, such as the World Wide Web, the internet begins to resemble a broadcasting entity. In its other forms, it can produce real-time chat.

There are many uses of the internet that mix multiple functions to great effect. For instance, E-vite, a division of the Interactive Corporation, blends traditional email with a number of other functions. Layered over email in a hypertext form, E-vite provides a 'free' service for people organizing meetings and parties. Identical invitations are sent out to those on the guest list, who are invited to respond not only with whether they are coming but also who might be accompanying them. Added features include the capacity for potential guests and the organizer to view who is coming to the party as it is developing. Also, individual guests can send particular short notes to the organizer that can be collected for the event. E-vite has been successful at becoming part of the organization of the smallest of birthday parties as well as large-scale events. In terms of the internet, it blends: the web with email through its sophisticated hypertext and image-rich original message and links to the specific site for replying to the invitation; email with listservs through its temporary guest list structure; and ultimately online advertising, as each of these paths has the potential to be a site for the placement of advertisements in exchange for its free use. Through electronic organizing, E-vite, which describes itself as the 'world's definitive social planning destination', claims in its 2003 annual report to have hosted via email 72 million events, delivered over 65 million email based invitations³ with a monthly average of 5 million users on its website (E-vite, 2004)

Although E-vite has developed a relatively unique service for users of the internet, the activities it facilitates identify the shift in cultural practices into new media cultures. E-vite has infiltrated and integrated a kind of commercial exchange in an arena of activity invested with personal cultural production and at the very heart of communities and groups, and how they maintain their social networks. Birthday parties, one of the most common uses for E-vite, are also the sorts of event that generate a great deal of personal development by individuals and investment by friends. Certainly restaurants and wedding services have developed unique markets through catering for children's birthday parties of the elaborate logistics of some marriage receptions, but it is rare that there has been a coordinating service for organizing the invitation list and the responses for the most everyday and the most intimate of our special occasions.

The internet has profoundly challenged the divides that traditional media have established between production and reception. Our investigation in this chapter is an attempt to unravel the new ways that individuals and groups use the internet. In its many forms, the internet celebrates cultural production. We could call the internet a DIY media form in its invocation to users to fabricate their media practices; but it is important to understand that this development of a DIY media form is not freed from the operations of corporations. The internet has developed into a blended structure in the tradition of E-vite, where personal uses are intertwined with very commercial imperatives. Emerging from this is a new cultural politics that needs to be explored more fully and investigated more intricately. The internet as DIY media form brings to the fore a number of key elements that we will investigate in turn as they manifest themselves on the web. First, as we have emphasized, the internet is focused on production for all its users. Second, the internet presents a new configuration of public and private that is being explored through its variety of communication forms from email and chat to websites and listservs. Third, the internet produces tensions and synergies between capitalism and cultural activity that are complex as they define the new terrain of cultural politics. Each of these elements is heavily intertwined with the others, for the sake of analysis in this chapter, we will explore each of them individually and assess their cultural implications.

Producing the internet's media form: the World Wide Web

Of all the various communication possibilities available via the internet, the development of the World Wide Web was most like a past media form. Even in its less graphically developed stages of the early 1990s, it provided electronic pages of information that could be read. What made it distinctive from other reading material was that the web page contained a means for the user to connect from one site to another web page developed by someone else. Any hyperlink, which traditionally has been designated through underlined text, became the access point to an infinite matrix of other URLs. As a user, this changed the discrete cultural object that was so much part of film production or book publishing into something new that

was defined fundamentally by its connection to other locations and sites. Users could begin in one location in their searches and finish somewhere with only the remotest connection to that original starting point.

With these origins of dispersion and interconnection of information and materials, we also have the outline of a different identity of the user involved with the web. The user was unlike an audience member generated by television or film. With the development of the graphic user interface of the web, first with MOSAIC (1993), then Netscape and lastly the prevalence of Microsoft's Internet Explorer, the user became a surfer of graphically rich sites. This graphic internet stage of the web, roughly from late 1993 to 1998, describes a period where the majority of websites were organized around text and image with possibly an animated loop image or gif to add an extra dimension. Thus websites for users resembled glossy magazines in their design and presentation. And they were 'read' with similar levels of surface intensity to their print counterparts. The entire web became an elaborate newspaper of stories and information that the individual pieced together into their own personal selections. To aid in this process of looking for interesting and relevant materials, search engines became the website that many users were drawn to as a first port of call. Lycos and Inktomi, along with a host of other search engines, provided the techniques to connect to related sites in the graphic internet stage of the web (Marshall, 1997). Yahoo! was also highly successful in organizing weblinks via categories of interest. America Online (AOL) constructed an internal network of connection through its keyword search technique, which would only bring up sites that were part of its family of content providers. In all cases, the user was offered an excess of possible sites with almost any search. As opposed to the scarcity model that depended on elaborate systems of gatekeeping of content in traditional media, the web served to break down those barriers in its relatively non-hierarchicalized representations of websites after any search.

The meaning of this experience for the 'audience' is complex. For one thing, the term audience no longer made sense for most web-related activities. Second, the concept of the user comes closer to the identity that the websurfer inhabits. The former coherence of national broadcasts or even coordinated movie releases as common experiences for the populace was not as possible through the web. Even the postmodern characterization of surface without depth is not an accurate way of describing the web experience; perhaps more than anything else the web allowed for the opposite of surface experience. With its plentitude of information on many subjects, it actually offered greater depth with greater ease of finding that information than ever before.

Developing in the graphic internet stage (1993-98) was a user subjectivity that had some other important attributes (Marshall, 1997). On one level, the user was isolated in his/her experience; after all, no two web-surfing experiences were identical and the use of the personal computer for web browsing helped to ensure the singularity of the activity. On another level, the web experience provided new forms of association that were much more difficult to manifest under old regimes of connection. Websites offered techniques of connection that overcame the problems of distance for the building of associations and communities. Although there have been many debates about the quality of the communities that have emerged from the internet, there is no question that there are new organizations

that have 'materialized' from its transnational reach and its capacity to provide infinite content on the most arcane or popular phenomenon. For example, websites as fan sites have proliferated in diversity and sheer numbers from this early era of the web; similarly websites devoted to particular kinds of knowledge, such as medicine, have expanded exponentially over the last decade. Websites dedicated to a particular kind of sport or pastime have become clusters of involvement for those whose own identity is connected to these activities. This sense of the web that is borne from this early excitement about its possibilities could be described as a subjectivity defined by passion. The web provides myriad opportunities for a form of affective investment that has greater significance because the website's existence itself implies that others share the particular passion.

A further attribute of the web user's subjectivity has been fostered by the perceived free quality of the original graphic internet stage. With its origins in universities whose users were given open access and with others connecting to the internet from work or other public places, in the first five years of the web there was a sense that the internet gave entrée to information that was not usually available free of charge. Even though home access was channelled through an internet service provider (ISP) with a monthly fee and/or phone rates, the initial sensation of something for nothing was prevalent throughout web surfing experiences. This sense of something for nothing did not emerge out of a cultural vacuum: a longer history in computer culture has been similarly constituted around a free flow of information. Many variations have emerged from this libertarian sentiment that is wedded to the internet. What has been described as the shareware movement, where developed computer code was openly accessible to others to modify and improve while acknowledging its source through voluntary payments, has been fundamental to many of the software developments and innovations in computer applications (see Europe Shareware, 2004). Open source, which is connected to the non-proprietary operating system Linux, has represented a perpetual challenge to both Microsoft and Apple's dominance in software development. Organizations such as the Electronic Freedom Foundation, with its original proselytizer John Perry Barlow, represented the political dimension of this general sensibility. Barlow among others argued for the web and the internet to be left alone to develop without government intervention and regulation: with this freedom, the internet and web could develop into a much more ideal community not corrupted by the larger powers and influences (Barlow, 1993; see also Free Software Foundation).

These various strains of understanding the web as free and as a place for the unfettered exchange of information have led to a range of subjectivities that define the web experience. In the least innocuous of these, the user of the web parallels the subjectivity of the library patron. The web acts as a remarkable resource where information can be borrowed and used for personal purposes. With the digitalization of images and text, the difference in that borrowing is that the copy is a perfect replica of the original. What breaks down in the web experience is the origins of material and the authorial control over that material. Nonetheless, the web user as library patron is an idealized conceptualization, however incomplete. Indeed, the diametrically opposed subjectivity of the web user is closer to the pirate, where old regulations of property no longer apply and the web itself is stateless and powerless to prevent what would traditionally have been called theft. The most dramatic and

pervasive example of the web user as pirate with all its romanticism intact is with music downloading. Although we will deal with music downloading later in this chapter, it is worth highlighting here how the founder of Napster, Shawn Fanning, represented a modern-day Robin Hood in the collective consciousness. Simultaneously celebrated for the simplicity with which he developed the exchange of music from millions of users (with his image on the cover of *Time* magazine – a tried and true but perhaps tired sign of cultural significance (Greenfield, 2000)), and painted as a villain by the music corporations, Fanning allowed users to flout and circumvent the cost of corporately produced music CDs.

To put this pirate-like identity back into the wider user subjectivity, it is accurate to say that web use has drawn the user into a new tactical and strategic counter-position to the emerging new economy and its imperatives. In this way, web use and the user is closer to de Certeau's notions of tactical and strategic interventions that sometimes imply a larger political direction, but more often describe that the interests of larger powers and corporations are not necessarily in alignment with the many users (de Certeau, 1984).

When one considers that the web is often accessed at work (40 per cent of all use by some estimates (Nielsen Mediametrix, 2004)) for non-work purposes and strategies, it becomes clearer that the web articulates de Certeau's moments of resistance that are pandemic in contemporary culture. Even the prevalence of pornography on the web highlights its use as not necessarily for the informational purposes imagined. This threatening possibility of kinds of knowledge and entertainment not culturally sanctioned has been the motivating force behind both parents' and governments' efforts to regulate the web in some way. The reaction to these efforts at paternalism has been more vociferous, and has concerted efforts to circumvent the controls and programs that constrain the use within a country or by a child. Emerging from this wider identity of the pirate is the hacker, an experienced invader and manipulator of computer code who demonstrates their prowess through feats of shutting down powerful corporations. In certain instances, the hacker has a political objective: most viruses and worms are developed to destroy those operating systems supported by Microsoft and one could read their political intention of unseating the monopolistic power of this overarching corporation.

Even this interesting schizophrenic subjectivity of library patron and marauding pirate does not quite encompass the varied structure of identity of the web user. What is missing is that even in the most mundane searches, there is something being produced by the surfer. Axel Bruns has highlighted a second split subjectivity through identifying terms such as 'producer' and 'producer' that some researchers have employed to express the new web 'audience' (Bruns, 2002). Part of the web experience is that consumption and reception rival qualities that are closer to production. Though it is a truism that web surfers become readers and viewers that resemble the audiences produced by television and magazines, it is an equal truism that they are drawn to produce their web experiences. This production of the user's entertainment and/or information is a component of the interactive qualities of the web that were developed in chapter two. The web invites us to click on to the next level, the next page, the next link or the next answer. Interactivity in many web structures, then, could be redefined as the interaction between production and consumption. The web user as producer leads to all sorts of repercussions, including a reorientation of how information

and media companies might use the web for profit. In a sense, the audience has always been an intermediary in what is being produced; now the audience's use is factored in to the actual presentation of the content. Looking at any successful commercial website, one is struck how elaborate its organization of content can be. In other words, even within a particular website there is a plenitude of content and possible different directions to take by the user. Even news has transformed because of the web: there is a greater search quality for information and news by users – what we could identify as informational news (Burnett and Marshall, 2003: 159–70). In other words, they are less dependent on one source and become comfortable in finding information rather than it being provided. The industry in the 1990s began differentiating between media that pushed information at the user as would happen in a television news broadcast and information that was designed to pull the user to move to a new level as it would on a website. Chris Chesher, trying to describe the differences between narrative and CD-ROMs identified the same differentiation: new media invokes you to respond, while older media forms attempt to evoke sentiments (Chesher, 1996). The web has clearly become a technology that invokes us to act and produce our content through our own searches.

In many scenarios, the producer dimension of the user is beyond what we have described as everyday searches. Each day new websites are produced and existing ones are transformed. The top search engines are now indexing over 3 billion web pages. Since the mid-1990s the majority of new websites have been commercial entities; nevertheless, the sheer number of personal websites produced by individuals continues to grow along with the overall size of the web. Although many meanings can be drawn from this explosion of personal websites and some of these will be explored further in the next section, it is evident that the web has catered to a desire in the populace to produce and to make something, and ensure that whatever is produced has the possibility of being seen. The will to produce is certainly not unique to the web. In terms of media forms, the development of the personal camcorder and even super-eight film was designed for home production of video and film. The still camera has had more than a century of use by 'consumers' as they produced images of their families and special occasions. This rich history of production through different media by individuals and not for profit possesses one clear distinction from the production of the website: the web is simultaneously a place for production, distribution and exhibition in a way that no previous media form has ever permitted. The rather severe gatekeeping that worked to determine what and who were permitted to exhibit or broadcast in forms such as film and television was not in operation on the internet and the World Wide Web. It should be made clear that other techniques have been implemented by powerful media and internet corporations to ensure that certain commercial sites attract a greater number of users than a personal website, but it is also important to underline that the potential for attracting audiences by one individual and not a corporation is an ever present sensation and possibility of the web. Some of the most successful internet corporations, such as Yahoo!, began as cataloguing websites designed by two individuals around their personal interests (Burnett and Marshall, 2003, 97).

Much like many other computer-related skills, web authoring has become increasingly more accessible as the software derived from the original codes has developed. Hypertext markup language, or html, is the basic language used to code the script that defines the

various features of web pages. Text and images are given 'html tags' or commands that – when the file is loading in a browser such as Netscape or Microsoft Internet Explorer – generate the colours, the design and the graphics that produce the sophisticated look of web pages. It is the high-quality design that has made website production such a compelling medium for so many to develop their individual websites. With relatively little effort, a web page can look as polished as a national glossy magazine. One of the features of learning to make web pages is that any web page that already exists can be copied and used as raw material for the development of a new page: the source code is all in place. This process of appropriation to both learn the html codes and master the new techniques of making websites has been used extensively by individuals. Source code is used and re-used ad infinitum. Moreover, software such as Dreamweaver can further simplify the integration of text, image and moving image into the structure of a site. More difficult coded sources such as Flash and Fireworks, along with Adobe Photoshop, are becoming commonplace on desktop computers for the development of websites. Even those disinclined to develop their skills with new computer software can simply save a word-processing file in html code. The most difficult procedure beyond making the website is developing a competency in uploading and downloading the various connected pages that the individual has constructed. Considering that most free email services provide both techniques and space for posting a website, hosting one is a challenge that is within the grasp of millions of web users. The limitations for the production of websites can be economic. Much like many consumer-developed 'production' activities, from home renovation to home videos, from gardens to art and craft work, the will-to-produce has become the domain of the middle class – though not exclusively by far. Viewed cynically, personal websites represent the most mundane of aspirations to be something more, but understanding the aspirational quality that is part of these productions allows us to understand more accurately how new media forms are permitting an exploration of production through production and how that sentiment is not limited to particular class fractions. The will to produce is a pervasive cultural phenomenon that is elemental to the appeal of new media and the cultures it has spawned.

The transforming public sphere

The idea of the public sphere has been very much wedded to the kinds of media that have been utilized, and the types and locations of discussion that were produced within any culture. Jürgen Habermas, in defining the public sphere, pointed to a particular time – late eighteenth- and early nineteenth-century Europe – where a vibrant public sphere developed which debated the issues of the day (Habermas, 1989). This public sphere was dependent on the publication of tracts, nascent newspapers, and books, as well as a location to read and further the discussion of their value. Coffee houses, reading rooms and cafes in nineteenth-century France to a degree defined Habermas's conceptualization of sites for the development of a public discussion both by providing the location of the reading material and the place where ideas could be explored in conversation. Although Habermas's interpretation of the public sphere has been criticized for representing a much too narrow fragment of the

population, particularly with the virtual exclusion of women, an active public sphere has generally been seen as a requisite for the operation of democratic societies. His work went on to describe how the emerging media and its organization in twentieth-century culture served to produce a decline in an active public sphere so that key interests could be overlooked and an ideology that only supported capitalism could flourish in this vacuum of energized discussion and eventual political action.

If nothing else, the internet has been heralded as a place for a new transformation of the public sphere. As some writers have pointed out, Habermas's conceptualization of a single public sphere overlooked the idea that multiple and intersecting publics could be operating within a culture and be developing new ideas and new political directions based on their smaller orbit of connection (see Robbins, 1993). Although various writers have argued that television developed all sorts of new political directions from its different constitution and evocation of an audience, the internet in its range of methods of communication has produced many active and invested publics in a much more obvious and politically engaged way.

In 2003, the effect of the internet on contemporary American politics was felt viscerally. Howard Dean, a Democratic Party presidential candidate and former Governor of Vermont developed a campaign that moved him from relative obscurity to national prominence via very pointed use of the internet as a way to connect to his growing body of supporters. His campaign moved beyond contacting potential supporters via email; it attempted to involve his supporters in the building of the meaning of the campaign itself. Supporters were encouraged to be part of discussion groups that were read closely by the campaign manager and Dean himself as they gleaned how the ideas of Dean had stimulated a growing cluster of interest. This interest led to financial support from hundreds of thousands of small donors, a type of financing that raised more than \$40 million and well in excess of any other Democratic candidate. His campaign gradually focused on opposition to the 2003 Iraq War, which was particularly valuable in connecting to younger voters who were very comfortable in using the internet as a communication medium that could generate large connections as well as small communities.

Dean's campaign had an official weblog, which provided an insider's view of the campaign as it toured across the country, and it encouraged an elaborate web ring for others to write about their experiences at a more grassroots level in connecting to potential voters. In the lead-up to the American primaries that select the party's candidate, Dean became the front-runner in December 2003 and early January 2004. Part of his success in using the internet led to the involvement of a whole new group of Americans previously excluded from the political process. His method of connecting to his supporters was to empower them as integral to the meaning of the campaign. This sense of empowerment was possible because the means of contact via the internet's various communication modes allowed for people to have a sense of both investment and solidarity in the common cause. The internet provided a classic blending of an almost personal connection between the candidate and the supporter as well as a means to present a public version of the candidate for wider consumption. The website functioned as an entrée into this particular world of Howard Dean and his political directions, and represented the most public version. The weblog with its more 'insider'

personal registar allowed the supporter the sense of belonging. With the campaign encouraging people to contribute to the blog and to begin their own sites and related blogs devoted to his election an elaborate network of related interest developed. The website entreated people to work towards a number of strategies of inclusion: donations, setting up local groups, and staying in touch with supporters from different states and different interest groups that supported Dean. A group celebrating youth support for Dean, calling itself GenDean and with its own website (www.generationdean.com), claimed 22,479 members and 1333 groups. On the official weblog, hundreds of links provided an elaborate but interconnected web ring of supporters. The site also indicated that 640,000 people were supporters and encouraged everyone to join the '\$100 Revolution' where small contributions from a massive number of supporters millions could be generated. Part of the appeal of Dean's internet campaign was its capacity to update daily. Augmented by opening the possibility for personal expression as testimonials generally, the internet campaign blended beautifully the public development of a politician with the more private but publicly expressed testaments by individuals. With supporters writing opinions and perpetually conversing and updating websites there was the genuine sense of producing and making what was an election campaign into a stronger political reality.

Although Dean's campaign for the presidency ultimately faltered as it moved from his dedicated supporters and organizers to the wider Democratic Party constituency and a presentation of himself via television, it was nonetheless, a remarkable organization of political will derived from a clear knowledge of the way that the internet can produce a sense of intimate connection even around the largest of public issues and the presentation of public personalities.

The internet can be seen as part of a larger cultural shift in the delineations and meanings of public and private. Although these shifts in contemporary culture predate the internet, the new media form allowed for a further exploration of the private in a public forum. For instance, webcams became a particularly popular means of expressing sometimes the most private sphere in the most public way. One of the original and most popular webcam sites was JenniCam operated by Jennifer Ringley, started while she was a college student and self-confessed 'computer geek'. Here is how she explained her site in 2003, seven years after its launch:

The 'JenniCam' is, in essence, a series of cameras located throughout the house I live in with my partner Dex and a small herd of animals. These cameras take images in this house all day long, every day... This site is a look through the virtual windows into my home. I don't act, play for, or really even pay attention to the cameras. I don't put on a show for you. But by the same token, I don't censor the cameras.

(Discontinued site)

From its launch, JenniCam made Jennifer Ringley a celebrity. Newspapers and magazines ran cover stories and anchored their coverage of the web and the internet with this brazen example of making one's private universe available for public consumption. The site attracted thousands of subscribers and devotees over the years – by her own estimation she was

receiving more than a million hits a week. Although she closed down her site in early 2004, its success over the years led many others to imagine that webcams were a means of crossing the virtual proscenium arch: the former audience members could now become stars of their own perpetual series. There are now elaborate webcam rings that present similar profiles of individual's inner sanctums. Subscriptions have developed and many of the webcam rings are now closely linked to pornography. It is true that webcams serve many other purposes – for instance, just marking a particular street corner or beach location to advertise the site as a travel destination. Nonetheless, personal webcams dramatically represent the blending of public display in private locations that embodies the web experience.

The internet has simultaneously heralded a new age of voyeurism, narcissism and exhibitionism, all within its various forms. Surveillance has also exited the world of internet webcams to become the organizing narrative of reality television around the world. This extended world of exposure is partly related to the ubiquitousness of the camera and the capacity to distribute the images presented. It is equally about a changed relationship to media and presentation that proliferates and generates more and more personal websites, webcams and commercial sites that play with the idea of looking in on private worlds. This new voyeurism in its twinned relationship to exhibitionism is fundamentally different than that developed via film and video where the audience members projected their identities on to the larger-than-life screen images. Via the internet, the everydayness of personal and intimate images that are perpetually accessible has transformed the cultural discourse of what is public and what is private, who is the performer and who is the audience.

Within this mix of public and private that the web has produced, the internet has led to a variety of communication forms that have drawn massive participation. Chatrooms, which are dependent on the relatively simple technology of internet relay chat (IRC), allow participants to engage in text-based real-time conversations. What has made this form another challenge to our divides between public and private space is the ease with which one can join chatrooms and communicate about some of the most intimate details of one's life. The transcendence of reserve is partly permissible because of the anonymity of any sender in the chat, and writers such as Tuttle (1995) and Markham (1998) among many others have written about how anonymity permits a floating identity in cyberspace. Indeed, notorious stories of false identities populate the first ten years of widespread internet use. Moral panics around children being drawn to meet fellow chatroom participants (adults posing as children) has surfaced as a regular story in television crime drama as much as newspaper articles.

In a more general sense, the internet has provided the means to engage in forms of interpersonal communication that permit time and space manipulation of the interaction. Traditionally, interpersonal communication is thought of as face to face in format and can be structured around dialogues and multilogues or conversations. Email, which can be used almost for broadcasting a particular message through sending that message to millions, is generally a technique of dialogue (one to one). It is, however, 'asynchronous' – that is, the responses are not at the same time and thus the form of interpersonal communication is mediated by a time difference in response. Internet relay chat, in contrast, tries to replicate the synchronous quality of communication. In order to speed up that connection, responses are

often very short and filled with emoticons and acronyms of frequently used expressions (a technique that has been further refined in mobile phone text messaging). Because of this time compression, chats emulate the interpersonal nature of phone conversations and face-to-face communication. Many researchers have been drawn to the effects of this new variation on interpersonal communication. For some of the subjects in Annette Markham's research, the lack of face-to-face interaction was liberating: one is no longer judged by appearances (Markham, 1998: 172-5). Identities become connected to how well you express your sentiments and argue your points and friendships, and liaisons build from that basis. Other researchers have worked to determine whether internet chat makes the least sociable dependent on its apparently isolating experience for their interactions. Findings have generally indicated that chat and other internet communication forms are just as likely to reinforce friendships developed externally as they are to build new virtual friendships. The internet reinforces the strong interpersonal bonds among family members and existing social ties, particularly those separated by distances (Few Project, 2000). As developed in chapter three, the intertwining nature of public and private networks that define the internet is permitting the development of new cultural groups and attachments. Hundreds of thousands of chatgroups work to exclude new members as much as they endeavour to reinforce a sense of belonging to those that already participate. Fan networks have been strengthened by the combination of websites and usegroups attached to very specific and niche interests. Politically inspired movements are possible with the internet in defying the problems of distance between their active members. The recent phenomenon of flash mobs or gatherings, where a group of people connected via that internet suddenly appear at a particular location in a given city, emphasizes the power of the internet to form connected and highly invested interest communities that can move seamlessly from the virtual to the real world (Kahney, 2003).

The weblog articulates this different composition of the various new media cultures that are emerging. At first glance, the weblog is simply a form of narcissism: but more accurately, it is another way an individual produces their identity. Much like how a front garden can be an expression of the occupants of a house, or how a mantelpiece or bookshelf is designed to reveal the identity of its owner, the weblog is an elaborate presentation of the self. The technology that is part of new media cultures, however, celebrates that production of the self in forms that were once the preserve of the media industry. With the weblog, the personal website with all its meanderings becomes a public testament, a proclamation of significance and an expression of individuality. At the same time, many weblogs are interconnected into rings where interests intersect and overlap and the individual quality of the weblog belongs much more to a linked social fabric. The personal weblog is a cultural feature of the landscapes of new media that expresses the desire to produce and the utilization of the most ready material for that production. Weblogs rely on the everyday experiences of their writers and their will to 'narrativize' those experiences. Along with personal websites and webcam sites, weblogs represent the desire and the outcome of the production ethos that prevails in new media cultures. As in Stuart Allan and Barbie Zelizer's investigations of immediate post-11 September New York, these apparent personal accounts became the raw material for the expression of the news event as the personal production became the source for countless journalistic stories (Allan and Zelizer, 2002). That particular moment led to the emergence

of the public weblog produced by columnists for major media outlets: the blog as a form of expression moved from new media diary to public forum that was part of older media forms.

The complex role of capital

Despite the internet's pedigree as a technology developed by government, the role of commerce has been part of the emerging cultures that have developed through the internet's various forms of communication. Indeed, government's involvement in the 1990s in many countries was motivated by a desire to develop the commercial quality of the internet. For instance, for its first 10 years electronic commerce via the internet was exempt from American taxation. In the United States, Al Gore's National Information Infrastructure (NII) was as much about a programme to ensure access to the populace as it was to build the necessary networks to facilitate an information economy boom.

As we have described above, two of the key identity tropes for the internet were as library patron and pirate. Both of these identities present a challenge to any commercial imperative for the internet. After all, neither of these identities can be thought of as an ideal consumer identity. In fact, one of the key challenges of the internet is that production is so dispersed among the millions of users that it is difficult to construct the value of particular information. As a result, the economy of the internet has taken many detours in producing profits. Countless internet businesses have failed because people have come to expect a free quality to internet service and open-ended possibilities for personal productions in one shape or another.

Estimating the size of the internet economy was part of its development in the 1990s as investors and analysts tried to work out the worth of companies that were trading in the virtual world. Giant e-retailer Amazon only generated its first profits five years after its initial appearance on the stock exchange, which underlines the phantom and future nature of much of the internet's 1990s economic value. In April 2000, there was a severe adjustment in the stock values of many internet companies and technology-related stocks where prices tumbled and thousands of start-up internet businesses disappeared within months or even days. This collapse was generally labelled the bursting of the dotcom economic bubble.

Since that collapse, the internet economy has become less separated from other aspects of industry and normalized as another component. When separating electronic commerce, estimates still put the international economy in excess of \$300 billion in revenues and activity. The travel industry has been transformed dramatically by people buying their airline tickets online and is exemplary of this normalization of internet use for certain types of business. Similarly, book retailing was overwhelmed by the eventual success of Amazon. Progressively, other existing businesses have developed an online presence to challenge the emergence of online-only companies. According to Forrester Research, in excess of 10 per cent of company websites are fully interactive for sales and not just promoting or advertising their products and services (Forrester, 2004). Increasingly people are comfortable buying online because of its simplicity and convenience. Advertising in various forms is another immensely profitable element of the internet. Roughly 3 per cent of advertising revenues

worldwide are now generated via the internet, giving rise to revenues of \$7.2 billion in 2003 according to its own industry board (Interactive Advertising Bureau, 2004).

What has been significant in the development of the internet is this new ground of contestation and cultural struggle between what defines a commodity and therefore becomes part of the domain of the internet economy and what evades that definition of value. With the massive production of websites by individuals and the equally massive production of information on these websites, the commercial dimension has been elusive for companies. It is important to understand this contestation from several key vantage points.

First of all, the economy of the internet cannot be separated from the tools that have allowed users access. With the development of the personal computer, relevant applications became the driving force for individuals and families to buy computers for their homes. One rationale for the purchase of a computer was to facilitate learning by school-age children. Thus software, usually in the form of CD-ROMs, expanded the value of the machine beyond a sophisticated typewriter. Dictionaries, encyclopedias, and drawing and document design software all became part of the meaning of the home computer in the early 1990s. Coupled to this development was the desire to make the home computer an entertainment source to expand its utility. Computer games further expanded the value of the home computer and led many upper-middle-class families to purchase individual computers for each of their children. Alongside the software expansion of the value of the computer was the emergence of the internet. Many ISPs initially offered access to the internet through modem – telephone connection to their bank of servers directly connected to the internet itself. Particularly successful providers such as AOL were able to construct a graphic overlay and an intranet of services and information that kept the user within their network. AOL's success was in its ability to translate the internet and its capacity into a ready-to-use and controlled environment. Each of these kinds of software and graphic interface overlays were designed to increase the accessibility of both the computer and the internet. Their commercial imperative as ISPs was driven by the need to expand their subscriber base; money was not made from the content of the internet, but rather by the numbers of people who were willing to pay a monthly fee for access.

Second, because the internet emerged from government developments (even though its expansion was initially dependent on telephone lines and eventually cables into homes) and was originally used extensively at universities, it maintained a quasi-public service dimension. After all, most countries ensured that their public libraries were connected to the internet so that the widest range of people could participate in the new information-driven culture. The internet resembled a public utility service, which in many countries had traditionally been directly run under a government-controlled agency or was highly regulated by government policy. In either case, even as the internet moved to a much more commercial model by the mid-1990s, this vestigial structure and vision of the internet persisted. As detailed earlier in this chapter, part of the emergence of personal computer culture and its intersection with the internet was a very libertarian notion of its status: the Electronic Freedom Foundation and John Perry Barlow have consistently articulated that the internet has to be an open and free space for activities.

Third, as a way to maintain the free quality of the emerging internet, the web and other

services have become inundated with advertisements. The objective of any internet-driven business now resembles any television or radio network: evidence of as many people as possible viewing the website so that their viewing can be sold on to advertisers. On television, the enticing and apparent 'free lunch' for watching all of the commercials is the actual programme. On the Internet, the equivalent 'free lunch' provided to users are services such as email. For example, Hotmail expanded rapidly to over 100 million users by 2001 as word spread virally about its ease of use and its capacity to connect to other users. Surrounding any Hotmail email are advertisements that are tagged to the correspondence. Similar structures surround Yahoo! accounts or Google searches. In some cases, search results reflect the desires of particular advertisers, where companies pay to be located in the top ten for particular search words. The internet has become a much more mature media form and generally has acquiesced to the presence of advertisements to keep the information ostensibly 'free'. What this has done is clog the arteries of the internet with extraneous information and make it much more like the space in a shopping mall. Nielsen supports this transformation of the internet by aggregating internet use from its surveys. Like television ratings, websites are bestowed value by the number of 'hits' they receive. These hits translate into advertising rates per thousand hits.

Paying for information without advertising has been decidedly less successful on the internet as advertising has become pervasive in all its transparent and timed pop-up windows. There are exceptions to this pattern of the internet. Pornography has had enormous success at getting users to pay. With elaborate 'free' previews, pornography sites are also quick to sell their 'viewers' to other pornography sites in a perpetual game of pop-up windows. Likewise, business information about companies and about trends in particular industries has had reasonable success at getting patrons to pay for information. These remain exceptions to the general rule of the 'freeness' of the internet – if we overlook the large sums collected through connection fees by the ISPs.

Finally, as much as the internet has become commercialized and has succumbed to the patterns of revenue and profit generation that are endemic to our contemporary media, it has also permitted new forms of contestation that have become foundational to understanding new media cultures. One of the features of digitalized products is that they have become much easier to copy. Moreover, the copy is a replica of the original with no real loss in quality. As described above, one of the key identities of the internet user is that of the pirate. This identity has emerged most strongly in music file sharing: Napster, the internet site developed by Shawn Fanning, was one of the first programs to facilitate copying music files from any computer connected to the site. Napster provided an elaborate directory of music available to be copied by the individual user. Some 30 million users of Napster made it the largest loose community of file sharing that one could imagine, all with an interest in getting music files to load on to their computers and into their MP3 players. The movement of music was extraordinary and other sites, such as Kazaa and Morpheus, continued the music file swapping after Napster had been legally closed down and resurfaced as a subsidiary of BMG Music.

This elaborate exchange of music was a challenge to the conventions of ownership and intellectual property. In the past, music sharing and copying was tolerated when it was done between friends. The internet allowed the category of 'between friends' to expand

exponentially into millions. And what once appeared harmless – the individual who allows his music to be copied by someone else is not profiting from the transaction – suddenly begins to challenge one of the foundations of the media industry and capitalism more generally: intellectual property rights. Similar exchanges have occurred with films and television programmes; however, the download time without broadband connection made the exchange much more time-consuming and difficult to become more widely utilized. Nonetheless, fileswapping is an outcome of the digitalization of entertainment forms and the expansion of the technology of the internet to connect individuals into elaborate interest communities that are not attached to the exigencies of any element of the entertainment industry. The cultures of new media have made intellectual property one of the terrains of contestation in contemporary culture.

Conclusion

This chapter has surveyed the most converged of media and how it has reshaped the audience into new categories of identity and media use. The internet has highlighted the will-to-produce and the idiosyncratic and sometimes intimate productions that have emerged from its multifaceted communication forms through its millions of users. The reverberations of this dramatic shift in control of the representation of culture and cultural activity are still resonating as much as forming elements of new media cultures. Loose communities have developed that, in some cases such as music file swapping, have challenged the organization of consumer capitalism. Other internet communities have defined themselves as political entities and forces that are leading to change in our politics. Large media corporations have worked to assert their dominance in this new field of activity, partly through their sheer size and partly through their capacity to add technological features that cannot be matched by the everyday productions that occur on the internet. The internet has engulfed a great number of activities and forms within its various structures of distribution and presentation; but what may be more significant is an even closer study of the moments of instability in cultural power that the internet brought to the fore over the past decade. Cultural access and cultural exclusion continue to operate as a dialectical struggle that has been thrown into sharp relief by the uses made of the internet.