

3

New Literacies: Concept and practices

Introduction: How long is 'new'?

This chapter spells out what we mean by new literacies and why we think it is worth taking this idea seriously. We focus first on what we mean by 'literacies' and then on what we mean by 'new'. The chapter also describes some illustrative examples of practices we count as new literacies and maps them in relation to one another. These examples are intended to sample new literacies across a wider range than will be possible in Part 2 of the book, where we focus in depth on Remix practices and Weblogging.

It is easy – indeed, all *too* easy – to make light of 'new literacies' by saying things like: 'Well there are always newer ones coming along, so that MOO-ing is already an "old" new literacy' Such remarks suggest that new literacies have a similar kind of life trajectory to a new Ford or Toyota car: new in 2006, semi new in 2007, and old hat by 2008. Against this kind of nanosecond or 'that's so yesterday' perspective, our view is that 'new literacies' are best understood in terms of an historical period of social, cultural, institutional, economic and intellectual change that is likely to span many decades – some of which are already behind us. We associate new literacies with an historical conjuncture and a 'rising' or 'ascending' mindset. From this perspective, the kinds of practices we currently regard as new literacies will cease to be *new* at the point where characteristics and 'ways' associated with the second mindset described in Chapter 2 have been incorporated into mainstream everyday social practice to the point where they are invisible, taken for granted, and lived out as 'normal' – as aspects of what will then be *conventional* literacies.

To repeat an earlier point about 'displacement,' this is not to say that the characteristics and 'ways' associated with the 'insider' mindset will be the only game in town. We are not talking about simple or complete displacement of one mindset and modus operandi by another, or about a total transition from one 'world' or 'space' to another. How the mix plays out historically, along with what comes next, remains to be seen. But 'new' is not over on an 'instance by instance basis' when, for example, MOOs give way to 3D role-playing worlds or chat palaces, or stand-alone, single player, ascii-interface video gaming gives way to online, massively distributed, three-dimensional, avatar-based, multi-player collaborative gaming that includes real-time text chat, VoIP (voice chat), and even video/webcam chat. So far as new literacies are concerned there will be many cameo performances as well as more enduring support roles and lead roles in this evolution. Some specific instances of new literacies may come and go quickly – playing no more than walk-on roles. Despite their short lives they are nonetheless identifiable as new literacies. They are all historically significant as parts of a larger picture that is not fleeting. To dismiss them as 'old' new literacies bespeaks a failure of historical imagination. Alternatively, to look for what is new in specific instances of 'new' literacies may be a good way of enhancing our perspective on current trends and priorities in our approaches to teaching and learning.

Conceptualising literacies

We define literacies as ‘socially recognized ways of generating, communicating and negotiating meaningful content through the medium of encoded texts within contexts of participation in Discourses (or, as members of Discourses)’. As with any definition of a phenomenon whose scope is large and complex, there are a number of key concepts here that warrant elaboration and spelling out in more detail.

- ‘Recognized ways’

What we mean by ‘recognized ways’ can be understood in relation to the concept of ‘practice’ as it is widely used with reference to literacy.

Scribner and Cole (1981) introduced a technical concept of ‘practice’ to literacy theory based on their research into the relationship between literacy and cognition. This research was undertaken at a time when it was common to think of literacy as a ‘tool’ or ‘technology’ – a writing system – that produces valuable outcomes when people apply it. Against this view Scribner and Cole conceptualised literacy as *practice*.

They define ‘practice’ in a series of statements. A practice is:

[A] recurrent, goal-directed sequence of activities using a particular technology and a particular system of knowledge ...

[It] always refers to socially developed and patterned ways of using technology and knowledge to accomplish tasks ...

[T]asks that humans engage in constitute a social practice when they are directed to socially recognized goals and make use of a shared technology and knowledge system (Scribner and Cole 1981: 236).

According to Scribner and Cole, applying knowledge to accomplish tasks in the presence of technology – where ‘technology’ isn’t confined to the digital, but includes a range of tools and techniques – always involves ‘coordinated sets of actions’, which they call skills. They identify such skills as part of any practice.

A practice, then, consists of three components: technology, knowledge and skills (1981: 236)

Rather than simple cause-effect relationships between a technology (e.g., literacy as writing system) and outcomes (e.g., new skills, new kinds of knowledge and thinking processes, economic and social development), a concept and theory of practice sees *all* of these – technologies, knowledges, and skills – as inter-related, dynamically connected to one another, and mutually evolving in conjunction with people’s changing ideas about purposes and tasks. Within broad fields or domains of practice – like education, medicine, farming, or cooking – changes in ideas about how something might be done will generate new tasks that call for

refinements in knowledge (theory, concepts, etc.), skills and processes, and technologies. These in turn will act back on people's ideas about what else could be done, in what ways, and so on.

Scribner and Cole then apply this concept of practice to literacy. They approach literacy as 'a set of socially organized practices which make use of a symbol system and a technology for producing and disseminating it' (1981: 236). They say that literacy is not a matter of knowing how to read and write a particular kind of script but, rather, a matter of 'applying this knowledge for specific purposes in specific contexts of use' (ibid.). This means that literacy is really like a family of practices – literacies – that will include such 'socially evolved and patterned activities' as letter writing, keeping records and inventories, keeping a diary, writing memos, posting announcements, and so on. These all vary to some extent from one another in terms of the technologies used (pencil, typewriter, pen, font options, the kind of surface 'written' on); the knowledge drawn upon (formatting conventions, use of register, information about the topic), and their skill requirements (hand-eye co-ordination, using a mouse).

The kinds of literacy practices described by Scribner and Cole on the basis of their research among the Vai people of Liberia constitute so many *recognized ways* of generating, communicating, and negotiating meaningful content through the medium of encoded texts. These ways are 'recurrent' – they are socially recognized as *patterns* of activity – and are engaged in on a regular basis under these socially recognized patterned descriptions. Since Scribner and Cole presented their accounts of practice and literacy practices the concept has been reworked many times (see, for example, Street 1984, 2001; Barton 1991; Prinsloo and Breier 1996; Barton and Hamilton 1998; Hull and Schultz 2001). Subsequent accounts have tended not to focus so explicitly on the technology and skills dimensions Scribner and Cole regard as central to understanding and investigating practice. They tend, rather, to emphasise the social recognition of particular features within given settings. Brian Street (2001: 11), for example, defines literacy practices as 'particular ways of thinking about and doing reading and writing in cultural contexts'. Regardless of such variations, the link between identifiable *literacies* and *recognized ways of engaging* remains intact.

- "Meaningful content"

While literacies call us to generate and communicate meanings and to invite others to make meaning from our texts in turn, this can only be done by having something to make meaning *from* – namely, a kind of content that is carried as 'potential' by the text and that is actualized through interaction with the text by its recipients. If there is no text there is no literacy, and every text, by definition, bears content. Gunther Kress (2003: 37-38) makes this point in relation to alphabetic writing. He talks of readers doing 'semiotic work' when they read a written text. This is 'the work of filling the elements of writing with content' (ibid.): that is, the work of making meaning from the writing in the text. Kress argues that meaning involves two kinds of work. One is *articulation*, which is performed in the production of 'the outwardly made sign' (e.g., writing). The other is *interpretation*, which involves producing 'the inwardly made sign' in reading (see also Gee 2004: Ch. 6).

Our idea of 'meaningful content' that is generated and negotiated within literacy practices is, however, wider and looser than many literacy scholars might accept. We think Gee's (1997)

Discourse approach to literacies draws attention to the complexity and richness of the relationship between literacies and ‘ways of being together in the world’ (Gee 1997: xv). So when we look at somebody’s weblog we might well find that much of the meaning to be made from the content has to do with who we think the blog writer *is*: what they are like, how they want to think of themselves, and how they want us to think of them. Likewise, a particular text that someone produces might well be best understood as an expression of wanting to feel ‘connected’ or ‘related’ right now. The meaning carried by the content might be much more relational than literal. It might be more about expressing solidarity or affinity with particular people. Our idea of ‘meaningful content’ is intended to be sufficiently elastic to accommodate these possibilities.

This is an important point when it comes to understanding the internet, online practices and online ‘content’. Almost anything available online becomes a resource for diverse kinds of meaning making. In many cases the meanings that are made will not be intelligible to people at large or, in some cases, to many people at all. Some might be shared only by ‘insiders’ of quite small interest groups or cliques. Consider, for example, the way that eBay has been used to spoof a range of social conventions and to generate diverse kinds of quirky and ‘nutty’ activity. A man auctioned his soul in 2006 and received a cash payment that came with the condition that he would spend 50 hours in church. In another case an individual auctioned a ten year old toasted cheese sandwich the owner said had imprint of the Virgin Mary in it, and that had not gone mouldy or disintegrated since it was made in 1994. Moreover, she said it had brought her luck at a casino. An internet casino purchased the sandwich for \$28,000 and planned to take it on tour to raise money for charity. Other sellers responded with Virgin Mary toasted sandwich makers, T-shirts, etc. (<http://news.bbc.co.uk/2/hi/americas/4034787.stm>). On 5 May 2006, Yahoo sports reported a Kansas City Royals baseball fan of 25 years finally giving up on the club and auctioning his loyalty (http://sports.yahoo.com/mlb/news:_ylt=A1ShQ.C4IOa6BJxsh9YuKJURvLYF?slug=jp-auction050506&prov=yhoo&type=lgn). The meanings of such actions have little to do with established practices of auctioning, and the interpretation of texts describing the items have little or nothing to do with the literal words per se. People may be prepared to spend money just to be in solidarity with the spoof: to say ‘I get it’, thereby signaling their insiderness with the practice, expressing solidarity with the seller, enacting an ‘affinity’ or, even, trying to save a soul. (See also the ‘Hopkin Green Frog Meme’ discussed in Chapter 4.)

In similar vein, the Swedish media activist group, Read My Lips, produced a now well-known multimedia commentary on the Bush-Blair alliance in the Iraq war. Read My Lips spliced together fragments of news videos of George Bush and Tony Blair, and synched their lip movements and onscreen actions with the love song, ‘Your Eyes,’ to produce a text suggesting an intimate romance between the two (atmo.se/zino.aspx?articleID=399). The resulting video expresses a strong indictment of the Bush-Blair alliance in the invasion of Iraq and is a popular clip within affinity spaces shaped by people critical of this invasion and/or critical of the militarist alliance between The US and Britain. Having no knowledge of the political and social controversy surrounding the war in Iraq would render this clip more or less meaningless or uninterpretable.

Aside from shared experiences or knowledge of current events, meaningful content within many new literacy practices clearly requires shared interests and pleasures. Remixing animé videos or films makes this point very clearly, as we will see in Chapter 4. This practice involves, for example, splicing together – remixing – very short clips from a range of commercial animé (animated Japanese cartoons) to create an entirely new narrative set to a matching new soundtrack (e.g., tfcog.net). Some remixes include no dialogue, but are instead synchronized, or ‘synched,’ with a deliberately selected music track to create animé music videos (Hatcher 2005). Animé remixes are likely to appeal most to existing fans of all things animé who enjoy other fans’ tinkering around with original texts to create new – albeit still recognizable – animé. Popular culture anthropologists like Mimi Ito argue this kind of creative work is driven largely by a push to communicate with and relate to interested others, rather than by the goal of sharing ‘information’ about specific animé productions or characters (cf., Ito 2006)

- “Encoded texts”

By defining literacies in relation to ‘encoded texts’ we mean texts that have been rendered a form that allows them to be retrieved, worked with, and made available independently of the physical presence of another person. ‘Encoded texts’ are texts that have been ‘frozen’ or ‘captured’ in ways that free them from their immediate context of production so that they are ‘transportable.’ From a cultural point of view the most salient point about literacy concerns the scope and scale of cultural production that encoded texts enable (by comparison with ‘unencoded’ texts that ‘expire’ at the point and time of production other than in the extent to which they live on in the memories of people who were there at the time). Encoded texts give (semi) permanence, transcendence, and transportability to language that is not available in the immediacy of speech, hand signs, and the like. They can ‘travel’ without requiring particular people to transport them. They can be replicated independently of needing other human beings to host the replication.

The particular kinds of codes employed in literacy practices are varied and contingent. Literacies can involve any kind of codification system that ‘captures’ language in the sense we have described. Literacy includes ‘letteracy’ (i.e., within the English language, recognition and manipulation of alphabetic symbols), but in our view goes far beyond this. Someone who ‘freezes’ language as a digitally encoded passage of speech and uploads it to the internet as a podcast is engaging in literacy. So, equally, is someone who photoshops an image – whether or not it includes a written text component (see Chapters 4 and 5 for more detailed discussion of this point).

Reflection and discussion

Compare and discuss the literacy knowledges, skills and techniques required to produce or make use of texts found at the following websites:

- Worth1001.org
- BoingBoing.net
- Manganews.net
- Newsgrounds.com
- Youaintnopicasso.blogspot.com
- JibJab.com

- Mugglenet.com/mugglecast

The different texts hosted on these websites can be variously copied and pasted into new texts, downloaded and uploaded to listening or viewing devices, burned to a CD-ROM disk for viewing on a different computer, saved to one's hard drive and replayed endlessly, bookmarked in one's web browser for future return visits, emailed to a friend, linked to from one's own webspace, and so on.

- “Participation in (or membership of) Discourses”

Jim Gee (1997: xvi) speaks of sociocultural approaches to language and literacy as *Discourse* approaches. Discourse can be seen as the underlying principle of meaning and meaningfulness. We ‘do life’ as individuals and as members of social and cultural groups – always as what Gee calls ‘situated selves’ – in and through Discourses, which can be understood as meaningful coordinations of human and non-human elements. Besides people themselves, the human elements of coordinations include such things as people's ways of thinking, acting, feeling, moving, dressing, speaking, gesturing, believing, and valuing, and non-human elements include such things as tools, objects, institutions, networks, places, vehicles, machines, physical spaces, buildings, and so on.

A person rushing an email message to head office as they hand their boarding pass to the airline attendant at the entrance to the aircraft boarding ramp is recognizable (to others and themselves) as a certain kind of person. In this moment she is part of a *coordination* that includes as its elements such things as the person herself, some way of thinking and feeling (maximizing time to get more done), rules (the phone must be switched off after leaving the gate), institutions (airports and air travel, the company they work for), tools (a phone, a network), accessories (a briefcase and compact travel bag), clothes (a suit, perhaps), language (facility with emailing concisely and accurately), and so on. These various elements all get and are got ‘in sync’ (Gee 1997). The various elements simultaneously coordinate the others and are coordinated by them (institutional requirements and timetables prompt the particular use of the phone during the last seconds before boarding; the email message makes a demand back on someone in the company; the meeting ahead has influenced choice of clothes – smart but comfortable; etc.). This ‘in syncness’ tells us who and what that person is (like, a business executive in the middle of a three city day). As Gee puts it: ‘Within such coordinations we humans become *recognizable* to ourselves and to others and *recognize* ourselves, other people, and things as meaningful in distinctive ways’ (1997: xiv).

Humans and non-human elements move in and out of such coordinations all the time. Identities (of humans and non humans alike) are chronicles of the trajectories of coordinations we move through, over time. Different coordinations call on us to think, act, believe, dress, feel, speak, relate, and so on in different ways to a greater or lesser extent. To know how to do this, when to do it, and that we should do it is the ‘nature’ of living meaningfully. Another way of saying this is to say that we get recruited to Discourses as part of our ‘birthright’ as social and cultural beings, and that in and through our social engagement with Discourses we each become identifiable as a particular kind of person (a trajectory and amalgam of ‘situated selves’ that

change as our purposes, contexts, and Discourse coordinations change) and learn to be a particular kind of person. A Discourse

is a way of ‘being together in the world’ for humans, their ways of thinking and feeling (etc.), and for non-human things, as well, such that coordinations of elements, and elements themselves, take on recognizable identities. ‘Discourse’ names the patterning of coordinations, their recognizability, as well as that of their elements (Gee 1997: xv)

Discourses are of many kinds – classrooms, sports, friendship networks, church gatherings, clubs, gangs, academic disciplines, discussion lists, chatrooms, types of women, weddings, funerals, families. They are made up by coordinations and they make coordinations and elements recognizable. Discourses are the stuff of meaning and meaningfulness; they constitute the ‘shape’ and ‘order’ of the world. We enact them and they enact us. To be in a Discourse is to be able to coordinate elements of that Discourse competently and to be coordinated by them competently.

These ideas provide us with ways of thinking about literacies, as elements of coordinations, and as themselves coordinations that are parts of Discourses, depending on the level of specificity being operated with in a particular case. So, for example, the case of the executive *emailing* a memo or request or reminder to head office while boarding a plane might be seen as an element in the enactment of a particular coordination that constitutes part of being a business executive (working on the run in a way that is recognizable as quintessential business executive *modus operandi*). From this perspective a literacy is an element in a coordination.

At a different level we might think of a literacy practice in the sense spelled out by Scribner and Cole as a coordination among technology, knowledge and skills. The business person from our earlier example who is being a letter writer, emailer, or memo writer involves coordinating an internetted telephone with knowledge of email/memo etiquette, format, register and institutional structure (who to send it to in order to get the desired result) and requisite skills (texting on the run with one hand and an eye to luggage and boarding pass with the other, all the while organizing thoughts succinctly).

As constitutive parts of participation in or membership of a Discourse, literacies are always about much more, and involve much more, than just the production of texts. They are (also) contexts or pretexts for enacting and refining memberships of Discourses that include such dimensions as feeding back, providing support, sharing knowledge and expertise, explaining rules, sharing jokes, commiserating, doing one’s job, expressing opinions, showing solidarity, enacting an affinity (Gee 2004) and so on.

In short, literacies are ‘socially recognized ways of generating, communicating and negotiating meaningful content through the medium of encoded texts within contexts of participating in Discourses (or, as members of Discourses).’ As such, blogging, fan fic writing, manga producing, meme-ing, photoshopping, animé music video (AMV) practices, podcasting, vodcasting, and gaming are *literacies*, along with letter writing, keeping a diary, maintaining

records, running a paper-based zine, reading literary novels, note-making during conference presentations or lectures, and reading bus timetables.

Reflection and discussion

Identify two quite different Discourses in your own life. Examples of Discourses to consider include your own family Discourse, dating Discourse, graduate student Discourse, teaching or teacher Discourse, political party Discourse, etc. Analyse key elements of the two selected Discourses in terms of characteristic, distinctive or socially recognized ways of:

- thinking and believing and ‘seeing’ the world
- speaking, reading and writing
- acting, moving, gesturing, etc.
- dressing
- feeling (e.g., about something, towards others)
- valuing, etc.

In your analysis include such non-human elements as:

- tools and technologies
- objects (including machines and vehicles)
- institutions
- networks
- places
- physical spaces, buildings, etc.

Discuss how such elements get coordinated within each Discourse. Then discuss how your two target Discourses require different social and language ‘moves’ and the ways in which people learn to move and act effortlessly within these Discourses.

Hint: Thinking about what a ‘newcomer’ to each Discourse would need to know in order to participate fully in each Discourse may help with identifying key characteristics of each.

So much for literacies in general. What now of ‘new’ literacies?

‘New’: in theory and in practices

At the end of Chapter 1 we spoke of literacies that can be regarded as ‘new’ in an *ontological* sense of being made of new kind of ‘stuff.’ We distinguished between new *technical* ‘stuff’ and new *ethos* ‘stuff’. At the heart of the idea of new technical stuff is *digitality*: the growth and ongoing development of digital-electronic technologies and the use of programming languages, source code and binary code for writing programs and storing and retrieving data. At the heart of the idea of new ethos stuff is the emergence of a distinctly contemporary mindset, discussed at length in Chapter 2. In this section we will elaborate briefly on these ideas by focusing on some especially salient aspects of ‘new technical stuff’ and providing concrete exemplifications of ‘new ethos stuff.’

(i) ‘New technical stuff’

Much of what is important for literacy about the ‘new technical stuff’ is encapsulated in Mary Kalantzis’ idea that ‘You click for “A” and you click for “red” ’ (Cope et al. 2005: 200). Basically, programmers write source code that is stored as binary code (combinations of 0s and 1s) and drives different kinds of applications (for text, sound, image, animation, communications functions, etc) on digital-electronic apparatuses (computers, games hardware, CD and MP3 players, etc.). Someone with access to a fairly standard computer and internet connection, and who has fairly elementary knowledge of standard software applications can create a diverse range of meaningful artefacts using a strictly finite set of physical operations or techniques (keying, clicking, cropping, dragging), in a tiny space, with just one or two (albeit complex) ‘tools.’ They can, for example, create a multimodal text and send it to a person, a group, or an entire internet community in next to no time and at next to no cost. The text could be photoshopped image posted to Flickr.com. It could be an animated Valentine’s Day card sent to an intimate friend. It could be a short animated film sequence using toys and objects found at home, complete with an original music soundtrack, attached to a blog post. It could be a slide presentation of images of some event with narrated commentary, or remixed clips from a video game that spoof some aspect of popular culture or that retell some obscure literary work in cartoon animations.

The shift from material inscriptions to digital coding, from analogue to digital representations, has unleashed conditions and possibilities that are massively ‘new.’ In the case of the shift from print to the post-typographic, Bill Cope (Cope et al. 2005) describes what this means for the visual rendering of texts. He explains that digital technologies reduce the basic unit of composition from the level of a character to a point below character level. In the case of a text on a screen the unit of composition is reduced to pixels. This has an important implication. It means that text and images can be rendered together seamlessly and relatively easily on the same page and, moreover, that text can be layered into images – both static and moving – (and vice versa) in ways that were very difficult – and in some respects *impossible* – to do physically with the resources of print.

In an old book there was a section with the plates and a section with the text ... For many hundreds of years ... text and images were quite separated, for very pragmatic reasons ... [I]n the first half of the 20th century ... photographic techniques ... moved away from letter press and plate systems [bringing text and image] together a bit more [with] film and plates, but it was still very difficult. But now the elementary manufacturing unit has changed radically. The raw materials you work with are on a screen. So when you press a key it actually builds a visual representation out of pixels.

... [Moreover] if you go back one layer ... beyond pixels, the same compositional stuff produces sound as well. So you have got these basic things about human communication – namely, language, visuals and sound – which are all being manufactured in the same raw material on the same plane in the same platform (Cope et al. 2005: 200).

‘Podcasting’ provides another example ‘of the moment’ (in early 2006). Let’s imagine the case of a hypothetical conference going on at this very minute. Given any necessary permissions being granted, the conference organizers or a delegate can podcast a presentation (it might be a keynote, or simply a regular paper that the person organizing the podcasts believes will be of interest to other people). The podcaster records the presentation on a suitable digital recorder (e.g., an iPod equipped with an iTalk add-on, or a digital voice recorder, such as those made by Olympus). Most of these devices record audio files in a *.wav format, which generates a high-fidelity, easy-to-edit, but very large file. When the talk is finished, the conference delegate transfers the audio file from their recorder to their laptop, converts the file to an mp3 format using software like iTunes or Garageband, which maintains the fidelity of the recording, but reduces the size of the file and makes it more ‘playable’ on a range of software applications and audio devices. The person podcasting the recorded presentation uploads the digitally encoded audio mp3 file to a server that can be accessed publicly via the internet.

Technically speaking, to podcast means that one posts audio files relatively regularly to the internet, and interested others can subscribe to the podcast and receive new audiofiles automatically. That is, podcasts are ‘syndicated’ (i.e., the location of the files online is ‘pointed to’ by ‘really simple syndication’ code [RSS]), and podcast aggregators can be used to ‘subscribe’ to all of this podcasters’ posted audio files. These aggregators – like Firefox or iTunes, for example – will automatically check for and download newly posted podcasts that then can be transferred to portable listening devices and played when convenient. Posting audio files online doesn’t necessarily require RSS feeds and syndication, however. The conference delegate could just as easily upload a single audio file to a server, and then make a post to their weblog that contains a hyperlink to that file. From that moment, anybody who accesses the blog can immediately access the sound file of the presentation by clicking on the appropriate hyperlink. (For more on mediacasting, see Chapter 5.)

Returning to our example, the recorded conference presentation can be augmented in various ways, such as including a short introductory narrative recorded and spliced into the front-end of the file by the podcaster, or by the addition of an accompanying short video sequence filmed during the presentation, or an automated copy of the slideshow presentation used by the presenter to illustrate key points. Alternatively, some digital voice recorders have camera functions that permit photo taking during a presentation. These photos can be ‘pegged’ to the sound file, so that at the moment in the sound file when a photograph was taken it will pop up as an image on the screen of the person viewing this ‘voice album’ file. This file can be uploaded to the internet and/or burned to a CD-ROM for ease of sharing, and so on. The same – or elements of the same – binary functions, programming logic, conventions and ‘stuff’ that encode sound can also be used to encode the images and video, the display interfaces themselves, and any online file hosting and networking services. The net result is a seamless, clean, elegant and rapid production that has global ‘reach’ at close to ‘real’ time (for an example of a podcast conference, see: isis.duke.edu/events/podcasting/casts.html).

The kinds of ‘enabling’ and ‘sharing’ reflected in what we have just described are quite revolutionary. Relatively unsophisticated bedroom-based desktop publishing software can generate text and image effects that the best printers often could not manage under typographic conditions, and ‘publishing’ now is no longer limited to print or images on paper, but can include

additional media such as voice recordings, music files, 2D and 3D animation, video, paintshopped images, scanned images of paper-based artworks, etc., as well. Even the concept of ‘text’ as understood in conventional print terms becomes a hazy concept when considering the enormous array of expressive media now available to everyday folk. Diverse practices of ‘remixing’ – where a range of original materials are copied, cut, spliced, edited, reworked, and mixed into a new creation – have become highly popular in part because of the quality of product it is possible for ‘ordinary people’ to achieve.

Machinima animations are a good example of our point here. ‘Machinima’ is the term used to describe the process by which fans use video game animation ‘engines’ (i.e., the code that ‘drives’ or generates all the images in a given video game) and computer-generated imagery (CGI) to render new animated texts on their desktop computers (in the not so distant past, this kind of text production demanded extremely expensive, high-end 3D graphics and animation engines and was found mostly within the realm of professional animators). Creating machinima involves using tools found within the game engine such as camera angle options, script editors, level editors, and the like, along with resources, such as backgrounds, themes, characters, settings etc. available in the game (en.wikipedia.org/wiki/Machinima). According to Machinima.com, a popular how-to website and archive of machinima animations:

You don’t need any special equipment to make Machinima movies. In fact, if you’ve got a computer capable of playing Half-Life 2, Unreal Tournament 2004 or even Quake [all three are popular video games], you’ve already got virtually everything you need to set up your own movie studio inside your PC. You can produce films on your own, or you can hook up with a bunch of friends to act out your scripts live over a network. And once you’re done, you can upload the films to this site and a potential audience of millions (2006: 1).

The term – machinima – is also used to describe the genre of animation generated by this process. These animations may be fanfics and extend a game narrative in some way, or the game may simply provide tools and resources for producing an entirely unrelated text. Machinima need not be amateurish in quality, either. Animations like *Hardly Workin’* and *Red vs Blue* have won film festival awards around the world (ibid.). It is now possible to download open source software kits designed expressly for designing and editing one’s own machinima using content from any video games. Those new to the machinima creation process can also now access online tutorials and interviews with renown machinima makers for insider tips on how to create one’s own high-quality animations.

The popularity of this kind of animation remixing has seen the launch of games that directly and openly encourage remixing, like Lionhead Studios’ ‘The Movies’ (themoviesgame.com). Alessandro Cima, a well known short film producer, has produced a range of animated texts that retell an often-overlooked piece of classic gothic literature (generally attributed to Bram Stoker), *Dracula’s Guest*. Cima has used tools and content resources from ‘The Movies’ in ways that give little indication that the backgrounds, characters, movements and camera angles were *not* created specifically for his *Dracula’s Guest* animations, but were instead selected from a preset menu of tools and resources (see candlelightstories.com/Movies.asp). Increasing numbers of

video games are also recognising the popularity of machinima and are creating games that more easily lend themselves to modification or to remixing (e.g., ‘Dark Reign 2’).

In a similar vein we find game ‘modding’. This involves the use of a video game’s image and strategy engines to create fan-driven ‘modifications’ to the game. These modifications remain ‘true’ to the game’s ‘universe’ (i.e., how characters can move, act, solve problems and what kinds of challenges are put in place etc. within the world of the game), but add, say, a new mini-adventure or quest for characters to complete. Such additions may expand a level by adding new skills or qualities to the game, or create an entirely new level for players to complete that adds a layer of difficulty or complexity to the game (cf Squire 2007/forthcoming; Steinkueler 2007/forthcoming).

Music can be sampled and remixed using desktop computers and audio editing software. Indeed, the term ‘remix’ itself grew out of the DJ sampling, scratching and mixing scene that began in the late 1970s and early 1980s (although music remixing itself has a long history as a practice; cf., blues music, ska music from Jamaica). This kind of music remixing now no longer requires an extensive and eclectic vinyl record collection, multiple turntables and bulky and expensive mixing and amplification equipment as it did in the 1970s. Software that comes bundled with most computers is all one needs to convert music files from a CD into an editable format (e.g., *.wav), to edit and splice sections of different songs together and to convert the final music files back into a highly portable format (e.g., *.mp3) and upload them to the internet for others to access, or to use them as a background soundtrack in a larger multimedia project. The popularity of Do-It-Yourself music remixing has also been recognized in the commercial sector, and for the price of a video game it is possible to purchase software packages that run on game-playing machines, like ‘MTV Music Generator 3: This Is the Remix’ for the Xbox gaming computer. (For more on remixing, see Chapter 4.)

This *enabling* capacity of binary code – the new technical ‘stuff’ – is integral to most of the new literacies that will concern us here. A lot of this enabling is by now so commonplace that we take it for granted, such as in everyday templates and interfaces. Examples include:

- blog templates and authoring tools that automate the ‘look’ of one’s text (and make it easy to change font style, colour, size, to include images or hyperlinks);
- writing/publishing tools like word processing software that make it easy to change fonts and text layout (e.g., columns, alignment, page orientation), or to insert images or figures or even sound files or live internet links, play with colours, and so on, by simply selecting a menu option;
- being able to open multiple programs – and windows within these programs – at the same time and move content between them via the copy-and-paste function;
- instant messaging interfaces that enable us to include iconic emoticons, attach files and save conversation transcripts;
- email interfaces that make it easy to read and respond to email, keep copies of sent messages, store and manage messages;
- being able to complete and submit forms online due to the development of ‘editable’ webpage interfaces;

- website interfaces that encode password and username functions that enable authorized access to certain online spaces;
- collaborative interactional spaces mediated by subscribing to email discussion lists using generally standardised subscription processes (e.g., sending an email to a listserv program that includes your full name and the command, ‘subscribe’);
- online forum interfaces that allow members to post, read and respond directly to comments;
- online real-time text-based chat interfaces that are now embedded into websites and no longer require the downloading and installation of specially-developed ‘client software’ in order to participate; and so on.

Reflection and discussion

The broadcast media run seemingly endless stories about young people reading and writing less and less these days. Yet large and increasing numbers of young people devote much time and energy to projects that involve remixing practices like machinima, photoshopping and music composing, and fan practices like manga drawing and fanfiction writing, etc. These projects very often employ sophisticated and/or complex narrative (and other generic forms, such as composing procedural texts and the like).

- How do you explain all this effort?
- Why do you think such practices aren’t considered significant or important by broadcast media accounts of young people’s reading and writing habits?
- Do you regard them as significant or important *practices*? If so, why? If not, why not?
- Do *you* regard them as significant or important *literacy* practices? If so, why. If not, why not?

Finally, there is a major issue associated with a feature of digitally encoded material available on the internet that introduces something profoundly new. The point in question is made by Lawrence Lessig (2004: 141-143). It has to do with copyright and a fundamental difference between physical space (or what Lessig calls ‘real space’) and cyberspace.

Lessig shows how copyright law in physical space distinguished three categories of use of copyrighted material: unregulated, regulated and fair use. For example, there are various uses of a book that are not subject to copyright law and permissions because they do not involve making a copy of the text (unregulated), or because they involve only copying an amount of the book (whether by photocopying, reproducing in a citation, or whatever) or having a purpose (e.g., scholarly review and critique) that is deemed to fall within the limits of ‘fair use.’ So A can lend a book to B to read, and B to C and so on, without falling foul of copyright – since no copy of the text is made. A can even resell the book. These fall within the category of unregulated uses, because to borrow and read a book does not involve making a copy.

But the ‘ontology’ of material available on the internet – ‘a distributed digital network’ (Lessig 2004: 143) – is different in a fundamental respect from material available in physical space. On the internet ‘every use of a copyrighted work produces a copy’ (ibid.). Without exception. This ‘single arbitrary feature of a digital network’ carries massive implications.

Uses that before were presumptively unregulated are now presumptively regulated. No longer is there a set of presumptively unregulated uses that define a freedom associated with a copyrighted work. Instead, each use is now subject to the copyright, because each use also makes a copy – category 1 [unregulated] gets sucked into category 2 [regulated]. (ibid: 143)

We do not have space here to deal with the intricacies of copyright law and permissions. Instead, we urge readers who have not done so to read Lessig's book. An excellent and important book on copyright and literacy, it goes to the heart of some pressing issues related to differences between the mindsets that we have distinguished here and the 'worlds' to which they attach. We will conclude this section with the point Lessig (2005) makes concerning young people and 'creative writing' in the current epoch of new tools.

Lessig describes a range of digital remix practices like AMV (Animé-Music-Video remixing), where people, a very large proportion of them young people, take 'found' artifacts and remix them into something new. In AMV practices, for example, participants record a series of animé cartoons and then video edit these to synchronise them with music tracks (see, for example, animemusicvideos.org). Lessig discusses digital remix as a practice of cultural creativity against the background of a particular kind of approach to creative writing that has traditionally been common in North American schools. In this practice

you read the book by Hemmingway, *For Whom the Bell Tolls*, you read a book by F. Scott Fitzgerald, *Tender is the Night*, and then you take bits from each of these books and you put them together in an essay. You take and combine, and that's the writing, the creative writing, which constitutes education about writing: to take and to remix as a way of creating something new ... And in this practice of writing we have a very particular way of thinking about how we learn to write. We learn to write in one simple way, by doing it. We have a literacy that comes through the practice of writing, writing meaning taking these different objects and constructing with them (Lessig 2004: np).

However, whereas the conventional creative writing practice as remix described by Lessig does not infringe copyright law, digital remix often does – and practitioners face the risk of legal action. Yet, says Lessig (2005: np), digital remix as a practice of cultural creativity is a kind of writing. In fact, new digital media, he says, are changing what it means to write. Digital remix, of whatever kind involving whatever media, 'is what writing is in the early 21st century' (ibid.). It involves working with a different set of tools from those we have written with in the past, says Lessig, but 'it is the same activity that we did [in the past] with words.' Now, however, 'it is not just words; it is words, sounds, images, video. What our society consumes is the source for this writing' (ibid.).

Lessig makes two further, crucial, points with respect to this new kind of writing. First, he argues that the way today's young people in societies like our own come to know their world is 'by tinkering with the expressions the world gives them in just the way that we [of earlier generations] came to know the world when we tinkered with its words'. To this Lessig adds the claim that this new writing needs the same freedoms as did the writing of the 18th, 19th and 20th

centuries. To do it well, he says, to understand how it works, to teach it, to develop it and to practice it requires freedoms that are currently outlawed. Hence, the kind of enabling potential inherent in digital tools underpinned by the ontology of digital code is a two edged sword under current legislation conditions. On the one hand it ‘democratises a certain creative process’ (Lessig 2005). On the other hand, its very nature means that the exercise of this democratized potential puts practitioners at risk under copyright law. Lessig argues that the law must change, and with that we agree entirely.

Reflection and discussion

While we were writing this book Marvel and DC Comics made a move to copyright the word, ‘super-hero.’ This unleashed a flurry of diatribes across the internet aimed at the comics conglomerate for presuming that such a term could be ‘owned’ and ‘corralled’, so that no-one else could use it without express permission.

- What’s going on here? Why might Marvel and DC Comics feel compelled to lay legal claim to the term, ‘super-hero’?
- What might be some of the implications of Marvel and DC Comics for fan-produced creations, or for future/new super-hero comics?
- What might be some the implications for everyday citizens of Marvel and DC Comics’ copyright maneuver? How would you feel about living in a world where certain phrases can only be used with corporate permission? What might this mean for the music industry, for example? What implications might this have for education in general, and for literacy education in particular?

(ii) ‘New ethos stuff’

As we will see in depth in later chapters, large and growing numbers of people are ‘joining’ literacies (and devoting impressive amounts of time and energy to them) that differ greatly from mainstream cultural models of literacy of the modern era (and, particularly, of literacies as they are constructed and engaged within formal educational settings like schools). Much of the ‘nature’ of this difference is captured in Jim Gee’s accounts of learning within affinity spaces (e.g., Gee 2004). While our interest here is wider than learning *per se*, some of the key features of affinity spaces that enable learning are nonetheless the very ‘stuff’ of how contemporary literacies are constituted and experienced more generally by people engaging in them. Gee (2004: 9, 73) describes affinity spaces as

pecially designed spaces (physical and virtual) constructed to resource people [who are] tied together ... by a shared interest or endeavor.... [For example, the] many many websites and publications devoted to [the video game ‘Rise of Nations’] create a social space in which people can, to any degree they wish, small or large, affiliate with others to share knowledge and gain knowledge that is distributed and dispersed across many different people, places, Internet sites and modalities (magazines, chat rooms, guides, recordings).

Affinity spaces instantiate participation, collaboration, distribution and dispersion of expertise, and relatedness (Gee 2004: Ch. 6). These very features are integral to the ‘ethos stuff’ of what

we identify here as ‘new’ literacies. In this section we briefly exemplify these features by reference to aspects of blogging, fanfiction writing and collaborative writing in wikis, as exemplified by Wikipedia.org.

Blogging as participation

We take up the theme of blogging as participation at length in Chapter 5. We will briefly anticipate that larger discussion here, by reference to how blogging taps into important aspects of the politics of internet architecture.

O’Reilly (2005: np) observes that some systems are designed to encourage participation (with the corollary that others are not, or are less so). Systems and media based on the logic of ‘broadcast’ are designs that minimize participation: few get to broadcast, and the traffic is one way. Systems like conventional publishing allow for limited participation: those (the few) who make it past various editorial gatekeepers get to publish their work, whether as authors of books, magazine articles, newspaper columns or letters to the editor. But again, apart from the very limited opportunities for review and response, this too is essentially one way traffic. If we take Mitch Kapor’s dictum that architecture is politics (cited *ibid.*), then the architecture of broadcast and publishing is a politics of participation by the few and reception by the many.

On the internet we certainly find examples of system designs that tend more toward broadcast and publishing. But we also, and increasingly, find examples of system designs that encourage large scale interactive participation – as well as designs at points between these extremes. The architecture of weblogs and the blogosphere can be seen as strongly pro-participation at many different levels. And the uptake in participation has been dramatic, with the number of *active* blogs estimated at 28 million by Technorati.com in mid-February, 2006. Given the enormous number of blogs now populating the internet, it is interesting to consider some of the different kinds and levels of participation in blogging and how they are facilitated and sustained.

An obvious starting place is with how the expertise of various agents has been put at the disposal of millions in the form of simple to use interfaces that make setting up and maintaining a weblog quite straightforward. Easy to follow instructions are quickly to hand. Most blog templates provide diverse options for degrees of ‘interactivity’ and ‘connectedness to others’ that users can set to their personal tastes and modify at will. These include options for enabling or disabling the ‘comments’ function attached to each blog post, for choosing to password protect one’s blog so that only invited others have access to it, and so on. The ready availability of online blog publishing tutorials and lists of frequently asked questions and answers to these questions (known as FAQ lists) make it as easy as possible for users to ‘grow’ with their blogs. They can shape the look and feel of their blog, vary its degree of connectedness to other blogs by means of outbound (and inbound) links, and enhance its degree of interactivity around the comments function or by adding a tagboard, and so on.

For example, Blogger.com, a popular weblog publishing service, has recently launched a user-to-user blogging help group (groups.google.com/group/blogger-help) where bloggers can post questions about technical issues (e.g., how do I change font colours? How do I add links to my blog sidebar?), or management issues (e.g., how do I delete my blog?), to troubleshooting

queries (e.g., what does it mean when I get a ‘permission denied’ message when I try and republish my blog?), or problems concerning access, use and participation (e.g., how can I block certain people from commenting on my blog?), and so on. Blogger also posts links to step-by-step online tutorials on inserting hyperlinks into one’s posts, hints and tips, such as how to aim for good quality writing in one’s posts, and so on.

The most basic blog ‘set up’ offers users an array of participation and interactivity options ranging from being a lone blogger and silent reader of other blogs to structural features of the blog that enable one to develop a ‘friends’ list that creates a tight network of people usually interested in similar things. The ‘friends list’ function of Livejournal.com blogs, for example, enables a blogger to link directly to up to 750 other LiveJournal accounts. Recent blog posts made by each ‘friend’ on a blogger’s list are automatically collated within the blogger’s ‘friends’ page, making it easy to not only to keep up-to-date with other people’s doings but which also enables conversations to spill across blogs (Rezak and Alvermann 2005). The ‘comments’ function available within most blog interfaces also distinguishes blogs from their earlier cousin, the personal website. The comments function means that blogs are not simply one-way publication sites, but that they can become highly interactive as readers comment on a post and as the blogger responds to comments in subsequent posts and perhaps elaborates on ideas, or visits the blogs of people who have left comments and leaves his or her own comments in relation to a post found there (cf. Davies and Merchant 2006).

More elaborate degrees and forms of participation are made possible through the use of services and conventions like syndication software and commands (RSS) and permalinks. O’Reilly (2005: np) describes RSS as ‘the most significant [recent] advance in the fundamental architecture of the Web’. The RSS function allows users to *subscribe* to a web page (whether a conventional website, web news page, wikis, or a blog) and be automatically notified through their browser (e.g., Bloglines.com, Squeet.com) or desktop client (e.g., NetNewsWire, Firefox) each time any page they subscribe to changes (provided that the owner of the website or blog etc. has included the syndication code as part of the ‘background’ program code that drives their site). In the case of weblogs, this means subscribers can read the most recent post on a blog to which they’ve subscribed and interact with it (e.g., by leaving a comment, linking to the post from their own blog or website, making a discussion post about it on their own blog), as well as simply participate in the life of that blog by following it actively.

RSS feeds may also be augmented with ‘permalinks’ (see the following ‘Reflection and discussion’ box) that point to a specific post on somebody’s weblog and that help open it up for discussion – so that when the post is automatically archived and no longer appears on the blog’s front page (a further architectural feature of weblogs) it can still be retrieved easily and directly. Tom Coates (2003: np) describes permalinks as ‘the device that turned weblogs from an ease-of-publishing phenomenon into a conversational mess of overlapping communities.’ Permalinks built the first bridges between blogs, and with this addition ‘discussion emerged. Chat emerged. And ... friendships emerged or became more entrenched.’ O’Reilly (2005: np) adds that the combination of RSS and permalinks turned the blogosphere into

a new peer-to-peer equivalent of Usenet and bulletin-boards. ... Not only can people subscribe to each other’s sites, and easily link to individual comments on a

page, but also, by a mechanism known as trackbacks [see the next ‘Reflection and discussion’ box], they can see when anyone else links to their pages, and can respond, either with reciprocal links, or by adding comments.

Relatedness and deep and active participation are enabled in the blogosphere through collaboration and sharing of expertise and material resources, realised in the form of readily appropriated interfaces, free blog hosting, syndication services, linking and tracking mechanisms, and information and help available at point of need. This spirit of an architectural politics designed to encourage participation has been taken up on a scale unimaginable less than a decade ago. The blogosphere has become a most vibrant dimension of ‘the live web;’ of ‘we the media’ – ‘a world in which “the former audience,” not a few people in a back room, decides what’s important’ (O’Reilly 2005: np).

Reflection and discussion

Visit boingboing.net and locate the [permalink](#) for any one of the posts appearing on the main page to see how permalinks work.

Next, click on the [blogs’ comments](#) link to see how the ‘trackback’ function on a blog works. This link will take you to all the blogs that link directly to that particular post. In some cases there may not yet be any links. Try the trackback link on a range of posts spanning a week or longer.

- What do you notice? To what extent does this tally with Coates’ and O’Reilly’s claims above?
- What do you think might this mean for effective school-based applications of blogs and blogging?

Collaboration, participation and distributed expertise in fanfiction

Fanfiction, which receives more in-depth attention in Chapter 4, has exploded as a popular literacy with the growth of the internet. In fanfiction ‘devotees of a TV show, movie, or (less often) book write stories about its characters’ (Plotz 2000: 1). Fanfic based on video game plotlines and characters is also growing in popularity. Fan fictions chronicle alternate adventures, mishaps or even invented histories or futures for main characters; relocate main characters from a series or movie to a new universe altogether; create ‘prequels’ for shows or movies; fill in plot holes; or realize relationships between characters that were only hinted at, if that, within the original text.

Plotz (ibid.) describes fanfiction as turning writing into a communal art, wherein ‘writing and reading become collaborative. We share the characters and work together to make them interesting and funny and sexy.’ Other fanfic writers are equally forthcoming about the collaborative and shared nature of their writing practices. One of our adolescent informants, SilverExcelFox, describes how she supplied a character for another online friend’s narrative:

She liked my review for one of her stories, and I was kind of talking about one of her characters [in the review], and she was, so, “I need another character. Do you

want to be it?” And I’m like, “Sure,” and I gave her a description of what I wanted my character to look like, and she took my character input it into her story (Knobel and Lankshear 2005).

Elsewhere, collaboration occurs when reviewers provide feedback on texts posted by authors for comment and review. This kind of dynamic exchange most often occurs via online forums and email discussion lists (see Black 2005a, 2005b, and Chandler-Olcott and Mahar 2003a). Authors and reviewers take the role of reviewing very seriously. Many fanfic writers, for example, make use of forums dedicated to ‘beta-reading’: public pre-publication forums where authors can obtain feedback on new stories before posting them to or publishing them on more formal fanfic sites (Black 2006a and b). Some moderated or filtered fanfic forums expect authors to have their narratives beta-read before submitting them for consideration for publication. The Force (fanfic.theforce.net) suggests that a beta reading should look for:

- Grammar and spelling errors. While a few errors are bound to make it through, too many such errors will result in a rejection.
- Plot continuity and technical errors. Your betas should let you know if there are any plot threads left unintentionally unresolved, and note places where there are internal continuity problems (eg, you had a character leave the room on page four, and she speaks again on page five without re-entering or using a comm-link).
- Character issues. Fan fiction allows much more freedom than professional fiction in terms of character interpretations, but your betas should point it out if your characters suddenly begin to behave very oddly for no appreciable reason.
- Intangible things. Ask your betas to tell you what they got out of your story before you tell him or her what you meant. “I like this!” is a nice thing to hear, but what you need from a beta reader is to hear, “I really liked the way you showed Qui-Gon’s early dissent from the Jedi Council, because it resonates with the way he behaves in his early scenes with Shmi in TPM” (or whatever). If that’s what you meant to convey, it tells you that you’ve succeeded. If it’s not what you meant, it can mean two things. You may decide that you really like it, and want to leave it alone or even expand on it. You might also decide that you absolutely don’t want to give that impression, and therefore you want to change the things that gave it. (fanfic.theforce.net/authors/subguide.asp)

Two points are worth noting here. First, these guidelines for beta readings are a typical example of the kinds of resources users can access in affinity spaces. Other similar kinds of resources that abound on fanfic sites include feedback discussion forums, feedback functions automatically appended to posted narratives within fanfic sites that let reviewers comment directly on a new text, and reviews sent to email discussion lists dedicated to fanfiction writing and/or fan art. Such resources typify the ‘ethos’ of affinity spaces generally. The beta reading guidelines resemble things available in the games-based affinity spaces discussed by Gee (2004: 84), like ‘FAQs that explain various aspects of the game and give players help with the game’ and ‘strategy guides and walkthroughs for “newbies” [new players]’. Artefacts like The Force’s beta reading guidelines can be seen as embodying several defining features of affinity spaces as described by Gee. These include: ‘Newbies and masters and everyone else share common space’; ‘Both individual and distributed knowledge are encouraged’; ‘There are lots of different routes to status’; and ‘Leadership is porous and leaders are resources’ (Gee 2004: 85-87).

The second point concerns the character of fanfic peer review at the level of lived experience. This, of course, varies from case to case, but an already recurring theme in the as-yet small corpus of literature that exists is of participants approaching peer review in open, non-defensive/non-aggressive, constructive and generously supportive ways. These ways often become communicative and relational in tone and on levels that differ from the circumstances and connotations of peer review within conventional ‘zero sum’ publishing (academic and non academic) contexts. Moreover, they may spill over into learning opportunities that extend far beyond immediate fanfic purposes.

Rebecca Black (2005a) presents a case of the social relations of peer review at their most expansive. A 14-year-old native Chinese speaker, now living in Canada, regularly begins her fanfics with an ‘author’s note’ (which she marks as, ‘A/N’) that asks for readers’ patience with her English while at the same time indicating that she is keen to improve her written English fluency. Her following author note begins with a friendly Japanese greeting (‘Konichiwa minna-san’), which translates as, ‘Hello, everybody’. This fanfic author also includes manga-fied ASCII emoticons in her message (e.g., ^_^ instead of the traditional :) to indicate a smile):

A/N: Konnichiwa minna-san! This is my new story
^_^ . Please excuse my grammar and spelling mistakes.
Because English is my second language. Also,
I’m still trying to improve my writing skills...so this
story might be really sucks....—;;

Black reports that these kinds of author notes ‘provide writers with direct access to the reader and enable authors to specifically state those elements of the story (e.g., form or content) on which they would like readers and reviewers to focus’ (2005a: 125). The author in Black’s example indicates tangentially that feedback on spelling and grammar would be appreciated. Reviewers have seemingly heeded these author notes and have written encouraging comments, including comments that the author writes much better stories than many native English speakers, or they have made suggestions for addressing grammar and spelling errors in the text (which, according to Black, the fanfic writer always addresses when revisiting and editing her posted narratives). At the same time, reviewer feedback emphasizes that these errors are ‘minor and do not interfere with the effectiveness and overall message of the story’ (ibid.).

Collaboration, community and collective intelligence in *Wikipedia*

Wikipedia is an online encyclopedia being produced collaboratively on the Web on the basis of broad principles of open source cooperation. It uses open-editing, collaborative writing software – a ‘wiki’ – that allows users to edit content online as they read. Many readers will be familiar with *Wikipedia* as a free online source of information, without necessarily being aware of how it is produced, and how one can edit the site just as ‘freely’ as one can access it for the purposes of obtaining information.

A wiki is about as easy to set up as a weblog. There are various free wiki hosting sites where one can register and establish a wiki for the purposes of a collaborative writing project. Bob Godwin-Jones (2003: 15) says the goal of wiki sites is ‘to become a shared repository of knowledge, with the knowledge base growing over time.’ This goal means that wiki content is ‘generally expected

to have some degree of seriousness and permanence’, and that successful wikis depend on users being ‘serious about collaborating and willing to follow the group [those who set up and participate in the wiki] conventions and practices’ (ibid.).

Wikis can be established on different bases, around such variables as membership, security, goals, and so on. For example, a research project team might set up a wiki for the purposes of collaboratively writing their research report and/or for generating articles, chapters or books out of their research. They might make the wiki password protected so that only members of the team can read and edit the content. All changes are logged on wikis, so it is possible to know when a change was made to content and who made a particular change (or, at least, the machine from which the change was made). It is also easy to arrange for anyone with access to the wiki to automatically receive information when a change has been made. At the other extreme, a wiki might be established as a maximally ‘open’ project, where anyone from anywhere can access the content and make any changes they want as well as to read what is there. (For a quick introduction to wikis see, for example, the entries on ‘wikis’ in *Wikipedia* at en.wikipedia.org/wiki/Wiki; or in *How Stuff Works* at computer.howstuffworks.com/wiki.htm).

Wikipedia is located at the open end of the continuum. Andrew Lih (2004: 3) explains that with thousands of international contributors, Wikipedia is ‘the largest example of an *open content* wiki.’ The goal is to ‘create an encyclopedia that can be shared and copied freely while encouraging people to easily change and improve the content’ (ibid). The origin of the project is interesting. Wales had previously been involved in a project to create a free online encyclopedia – Nupedia – with recognized experts as contributors who, with few exceptions, would have PhD degrees. When resources for the project ran out (with just a tiny proportion of articles written), Wales and his collaborator, Larry Sanger, put the completed material into a wiki and invited netizens at large to edit and add to the material. This new wiki-based project became Wikipedia.

Wikipedia was established with an editorial policy and guidelines. The cornerstone of the policy is a concept of maintaining a neutral point of view, which involves trying ‘to present ideas and facts in such a fashion that both supporters and opponents can agree’ (cf., Lih 2004: 4). Phillippe Aigrain (2003) says that this editorial policy together with a clear vision of what it is trying to achieve means that Wikipedia has, in effect, a constitution.

It is often observed that Wikipedia is not the kind of project one might expect to work. Its operating logic seems counterintuitive, and the extent to which it has earned respect and generated content across a wide range of subject areas rather than collapsing into chaos seems surprising. There is no overt upfront gate keeping mechanism to check credentials of contributors, quality of the material contributed, or even the goodwill of contributors. Yet, by February 2004 it had more than 200,000 articles in English at various stages of development. This number exceeded 975,000 in February 2005, at which time the English version had almost 950,000 registered users, and 820 administrators. Administrators have ‘SysOp’ (systems operator) rights, and anyone who has been an active contributor for a while and is generally a known and trusted member of the [Wikipedia] community’ can be an administrator, and is actively encouraged to be (Lih 2004: 9). Total content at this time exceeded 3,400,000 pages, and contributors had made over 40 million edits. Lih (2004: 9) reports that by early 2004,

Wikipedia was being cited increasingly frequently in the commercial press as ‘a secondary source for further reading’ and also as ‘a source on historical facts and figures.’

Commentators explain the success of Wikipedia quite simply. Its constitution provides guidelines that are easy enough to operate, such that if enough people are operating diligently on the basis of the constitution it is not difficult to eliminate ‘noise’ or ‘excess’ (Aigrain 2003). Felix Stalder and Jesse Hirsh (2002: np) suggest that this condition is met because Wikipedia ‘has a “community” character to it, so there seems to be a certain shared feeling that it is a valuable source and needs to be maintained properly.’ This is enabled by an ‘advanced versioning system’ (Aigrain 2003: np) that makes it easy to revert to an earlier version of an entry. It actually takes much more effort and time to ‘mess with a page’ or ‘enter noise’ than it does to revert to an earlier version (a single click). Stalder and Hirsh (2002: np) mention two further factors contributing to the workability of Wikipedia. One is that contributors who have devoted time and effort to making an entry have a vested interest in maintaining and improving it. Hence, they will return to it and tend it regularly. This is abetted by an RSS function that sends alerts to people who request them when a particular entry has been amended. Participation can be at any level from correcting a minor glitch, to being ‘an author who maintains a lengthy entry,’ to being an editor ‘who continuously improves other people’s entries’ (ibid.).

An interesting case occurred in January 2006 when it was found that staff in the offices of some politicians in the U.S. House of Representatives had modified material in the Wikipedia entries on these politicians that risked reflecting badly on them. More than 1000 edits in total were involved. When Wikipedia members examined the server addresses of people who had made changes to these particular entries and traced a significant number of them directly to White House offices in Washington. The selective editing and revision was first reported in a Massachusetts newspaper by Evan Lehmann (2006). News of the sleuthing spread rapidly through the blogosphere and into the broadcast media. An independently re-written Wikipedia entry for one of the politicians involved now contains references to staff interference in the original Wikipedia entry. There is also a new separate entry in Wikipedia on ‘Wikipedia: Congressional Staffer Edits’ that documents the scandal and lists politicians implicated in it.

O’Reilly (2005: np) identifies Wikipedia as a Web 2.0 initiative that ‘embraces the power of the web to harness collective intelligence.’ This is the principle of maximizing user activity to generate more valuable outcomes. Just as Amazon.com’s architecture for information management and its suite of user activities ends up producing a fantastic bibliographic data base, so Wikipedia’s architecture and user ‘brief’ is producing an impressive informational resource. O’Reilly (ibid.) is one of several commentators who associates Wikipedia with the open source software principle coined by Eric Raymond that ‘with enough eyeballs all bugs [or glitches] are shallow.’ In the context of writing code, this means that the more people with some knowledge of programming – and they don’t have to be *experts* and most of them aren’t – who apply that knowledge in the act of peering at code, the more likely and easy it is that ‘bugs’ in programs will be identified and fixed. In addition, however, it is also more likely that many small contributions will be made (not simply bug elimination) that positively *enhance* the elegance and functionality of the program. In the context of Wikipedia we can see these two sides to harnessing collective intelligence. One side enhances the quality of what is already there, by

adding cumulative positive improvements (40 million edits). The other side maintains quality by removing value-subtracting material, whether malicious or simply low quality fare ('noise').

This all adds up to a distinctive 'stuff' of social practice, particularly when we relate it to regimes of literacies with which we are familiar: where competence is presumed to be a private possession (hence, we test it): where expertise is the preserve of authorities (teachers, academics) who ladle it out (often ineffectually) as curriculum, remediation, instruction; where correct or successful performance is governed by 'one size fits all' sets of rules (which, among other things, means that legions of learners born on the wrong side of standardized grammars, lexicons, and semiotics spend their school lives actively reproducing their own failure); where commodification is normal practice (an author wants to publish a novel, so hires an agent to make suggestions for improvements, pitches to publishers, greases wheels, etc.); where, more often than not, the rules and criteria are vague, hidden, inaccessible; where status is individualized because achievements are individualised; and so on.

In terms of 'ethos,' the ontology of literacies like blogging, writing fanfiction and collaborating in Wikipedia celebrate inclusion (everyone in), mass participation, distributed expertise, valid and rewardable roles for all who pitch in, free support and advice, building the practice, collective benefit, cooperation before competition, everyone a winner rather than a zero-sum game, and transparent rules and procedures. There is more. Within a few hours of completing this section we were checking the news from an Australian perspective online, using the News.com.au service. Beginning here: news.com.au, we selected the 'Week in review' link which took us to: news.com.au/story/0,10117,18176795-421,00.html. At this page we selected a hyperlink for 'Bali Nine verdicts.' This took us directly to a Wikipedia entry: en.wikipedia.org/wiki/Bali_nine. From News Corp to Wikipedia in two degrees of separation. Current news was being reported via an encyclopedia, drawing on an entry with no author byline and, in all likelihood, produced by multiple authors and editors who have no other connection than the fact that their efforts ended up on the same webpage.

Reflection and discussion

What implications for 'knowledge' and 'news reporting' do phenomena like blogs and Wikipedia have?

What becomes of 'experts' within these practices?

To what extent do you agree that practices like Wikipedia, fan fiction writing, blogging, and remixing are new literacies? What reasons support your position?

'New' literacies: Paradigm and peripheral cases

We see the 'technical stuff' and the 'ethos stuff' that for us constitutes what is *new* about new literacies as being closely related to one another. A certain kind of technical stuff – digitality – facilitates the kinds and qualities of collaboration, participation, distributedness and so on that we have described. Equally, however, a certain kind of ethos stuff – an insider mindset/a Web 2.0 orientation – will shape the take up and development of technical stuff in some directions (e.g., relational, interactive, collaboratory) more than in others. Hence, computers have become telephones and telephones have become computers. The kinds of practices we regard as

paradigm cases of new literacies are characterized by both the new technical stuff of digitization and the new ethos stuff of the second mindset and, more specifically, a Web 2.0 orientation.

As O'Reilly (2005) affirms, you can have new technical stuff without having new ethos stuff. As he also argues, however, the direction of shift at the technological 'leading edge' appears to be increasingly toward architectures supporting practices that are forging stronger and deeper realizations of the second mindset. We think this is an historical trend. It supports our view that where literacies participate in the second mindset but are not (necessarily) mediated by digital technologies we can nonetheless plausibly regard them as 'new' literacies – albeit as more *peripheral* cases of new literacies than cases that *also* involve new technical stuff. In other words, having new ethos stuff is a sufficient condition for being a new literacy. By contrast, having new technical stuff is neither a necessary nor a sufficient condition for being a new literacy. It might just amount to a digitized way of doing 'the same old same old'. In the final analysis, being on the inside of 'the new' has to do with mindset. Technical stuff can amplify and more fully realize that insiderness. Merely having access to the technical stuff, however, is no guarantee of insider status.

To conclude this chapter we will describe two new literacies and relate these to key points in our account of new literacies. One of these – Flickr photo sharing – is a *paradigm* case of a new literacy. The example we begin with, however, is a *peripheral* new literacy. This is scenario planning, a chronologically recent literacy, increasingly popular from the 1970s. It has no necessary link to the use of new technologies, although computers can play very useful roles in the scenario planning process and are now often used by scenario planners for a range of purposes (from maintaining archives to modeling data).

(i) Scenario planning

Scenario planning has emerged as a generic technique to stimulate thinking about the future in the context of strategic planning (Cowan et al. 1998). It was initially used in military planning, and was subsequently adapted for use in business environments (Wack 1985a, 1985b, Schwartz 1991, van der Heijden 1996) and, more recently, for planning political futures in post apartheid South Africa, Colombia, Japan, Canada and Cyprus (Cowan et al. 1998), as well as in technology futures planning in Europe and elsewhere (Börjesson 2005). While scenario planning can be undertaken on behalf of very large units (European Union, individual countries, global corporations), with expert guidance by paid consultants, much smaller concerns like schools, community organisations, faculties within a university, and clubs engage in this form of narrating possible futures.

Scenarios are succinct narratives describing possible futures and alternative paths toward the future, based on plausible hypotheses and assumptions. The idea behind scenarios is to start thinking about the future now in order to be better prepared for what comes later; to facilitate conversation about what is going on and what might occur in the world around us, so that we might 'make better decisions about what we ought to do or avoid doing'. Developing scenarios that perceive possible futures in the present can help us 'avoid situations in which events take us by surprise' (Cowan et al. 1998: 8).

Proponents of scenario planning insist that scenarios are *not* predictions. Rather, they aim to perceive futures in the present (Rowan and Bigum 1997). Peter Schwartz (1991) provides the analogy of an experienced actor who has been given three very different plays to read and practice for during the preceding weeks, but on opening night does not know which one s/he will be performing. Schwartz says the good actor will have learned all three plays and will immediately look at the set. The surroundings reveal which play the actor is in. Being prepared for all three underwrites a successful performance. In this sense scenario planning is like writing and rehearsing plays now for some future performance. The trick is to write plays of such a nature that our rehearsing them *now* means that we can perform well in that future time.

Within typical approaches to scenario planning a key goal is to aim for making policies and decisions *now* that are likely to prove sufficiently robust if played out across several possible futures. Rather than trying to predict the future, scenario planners imaginatively construct a range of possible futures. In light of these, which may be very different from one another, policies and decisions can be framed at each point in the ongoing ‘present’ that will optimize options regardless of which anticipated future is closest to the one that eventually plays out in reality.

Scenarios must narrate particular and credible worlds in the light of forces and influences currently evident and known to us and that seem likely to steer the future in one direction or another according to how they play out. A popular way of doing this is to bring together participants in a policy or decision making exercise and have them frame a focusing question about or theme relevant to the area they are concerned with. If, for instance, our concern is with designing courses in literacy education and technology for inservice teachers presently in training, we might frame the question of what learning and teaching of literacy and technology might look like within educational settings for elementary school age children 10 years hence.

Once the question is framed, participants try to identify ‘driving forces’ – social, technological, economic, political, etc. – they see as operating and as being important in terms of their question or theme. When these have been thought through participants identify those forces or influences that seem more or less ‘pre-determined’: that ‘will play out in more or less known ways in any credible story that is told about the future’ (Rowan and Bigum 1997: 81). Participants then identify *less predictable* influences, or uncertainties: key variables in shaping the future which could play out in quite different ways, but where we genuinely can’t be confident one way or another about how they will play out. From this latter set, one or two are developed as ‘critical uncertainties’. These are forces or influences that seem especially important in terms of the focusing question or theme but which are genuinely ‘up for grabs’ and unpredictable.

The ‘critical uncertainties’ are then ‘dimensionalized’ by plotting credible poles: between possibilities that, at one pole are ‘not too bland’ and, at the other, not too ‘off the wall’. These become raw materials for building scenarios: stories about which we can think in ways that suggest decisions and policy directions *now*. In one scenario planning exercise in which we were involved, concerning the future of technology and literacy teaching in primary school learning, the critical uncertainties were identified as the nature and use of new computing and communications technologies and the nature of schooling as related to work and play. This yielded two axes. One ranged between ‘schooling is highly regulated, controlled and work-

directed' and 'schooling based on personal fulfilment, individualistic, anarchic'. The other ranged similarly between 'new technologies used to liberate: a technosociety that is anarchic and democratic' and 'new technologies controlling and regulating all aspects of life'. (Rowan and Bigum 1997: 81-82). Making one of these the X axis and the other the Y axis gave four quadrants, each of which was developed as a scenario ('Surface Paradise,' 'Newtopia,' 'Spacehaus' and 'Bill@ the_world') in the light of all the prior discussion and knowledge searching done to elaborate the 'driving forces.' (For examples from other contexts, see Börjesson 2005; Cowan et al 1998).

In terms of our account of literacies, scenario planning generates and communicates meaningful content of different kinds at multiple levels of interest and engagement – from identifying and describing 'drivers' and 'critical uncertainties' (and what *makes* them uncertain but extremely important) through to the narratives themselves. Planning scenarios may be an aspect of participating in Discourses as various as those of policy developer, curriculum planner, club committee member, corporate executive, curriculum planner, etc. At the level of socially recognized ways of doing the text production and exchange, scenario planning can be understood as practice in terms of its *technological* components (participants might use blackboards, whiteboards, butchers paper, word processors, networked computers, etc.), some kind of *knowledge system or systems* (e.g., about narration, strategic planning, policy) and a range of *skills* (how to distill critical uncertainties, identify drivers, frame punchy motifs for crafting scenario narratives).

Scenario planning emerged before the advent of personal computers and long before personal and networked computing became popular. It developed in contexts of face-to-face interaction and the use of conventional print resources. Much scenario planning work is still best conducted around a board, using small groups and charting ideas on paper. Nonetheless, it is easy to discern much of what we regard as 'new' about new literacies in scenario planning. Successful scenario planning positively depends on distributed expertise, as well as upon dispersed knowledge. In collaborative activity the participants bring different perspectives and knowledge to bear on a theme and progress is made through interactivity, feedback, and sharing ideas and expertise around. Indeed, the very subject matter – possible futures, and 'what if X happened?' – resists and transcends individualized expertise. There is a much of the second mindset to scenario planning as a practice. It is more service than product oriented, and the process benefits from maximum dispersion. Scenarios are often made widely available because their true value comes from engagement with them, and feedback, and improvement on policy thinking that can come from this engagement. The benefits of good scenario planning are collective, not private, which presupposes dispersion. Mobilizing collective intelligence enhances outcomes and adds value.

(ii) Flickr

Flickr (flickr.com), now part of Yahoo.com, is a website established for archiving and sharing digital photographs and for providing related web services. Use is free, and anyone can browse photos that are designated 'public' regardless of whether or not one is a member. Signing up is a straightforward matter of clicking on the sign up button on the Flickr homepage. There appear to be two main ways that people come to join Flickr. They may hear of it by word of mouth (or page or screen), locate the Flickr website and join up. Alternatively, they may receive an

invitation by email from an existing member inviting them to join. Obviously, while anyone can browse photos that are available for public viewing (rather than designated 'private' or only for the user's chosen contacts to view), only account holders can actually post and comment on photos. There are two types of accounts. One is free. The other requires a yearly subscription fee and grants access to a range of added features. To save space and complication we will focus here on participation as a member (or account holder) holding a free account.

Members can use Flickr in different ways and to different degrees. One extreme is wholly private use, where the space is used simply for storage: to archive one's photos and, perhaps, as a base for uploading photos to one's blog. At the other extreme members invite others to view their photos, join groups based on a theme or interest, establish groups and recruit others to them, comment on their own and other people's photographs, participate in Flickr forums (ask/respond to questions, suggest features, report a bug) and activities, and build special relationships that can spill over into offsite spaces (and, even, into physical space) with other members who share an interest (Davies 2006).

The catalyst or stimulus for participation in Flickr is the digital image and, especially, the digital photograph. Images uploaded to Flickr can include scanned hand-drawn drawings or paintings, paintshop-generated cartoons, scanned collages, and so on. But the most prevalent image-type within this space, by a large margin, is the digital photo. Posting photos involves making various kinds of written contributions. When users upload photos to their Flickr account the on-screen display template provides a space for keying a title for each photo. A second space for keying a short description appears beneath the photo. There is also space to write words to serve as 'tags' or keywords for the photo (see Chapter 2 for more on the use of tags). In addition, a function in a menu bar above the photo enables the user to write notes that will appear directly on the image when s/he scrolls the cursor over each 'note' icon. The display template also provides a space for comments, similarly to a weblog. Other users can comment here on each photo and users can comment on their own photos.

The free version of Flickr also has provision for users to establish up to three 'sets' of 'like' photos. This serves several enabling purposes. It helps with managing viewer access to images, with joining groups that are organised around a subject, interest, or endeavour (e.g., Flickr members who take pictures of bins, or fire hydrants, toy and doll shots, storytelling projects), with bookmarking 'favourite' images posted by other members, with designating who can access each photo (e.g., everyone, or only those users marked as 'friends') and what rights others are assigned with regard to using the photo in other venues. It also helps with inviting other people to join Flickr and to become a contact (friend or family) of the user. As discussed in chapter 2, users designated as 'contacts' can add 'tags' to the user's photos.

There are many other aspects of posting photos that we cannot go into here (e.g., monthly image uploading limits, procedures for starting a new Flickr 'group,' etc). We will confine further discussion here to a typical example of participation on Flickr.com. It involves the Flickr group 'Tell a Story in Five Frames' (flickr.com/groups/visualstory). The group page describes the purpose of the group and how to participate. Participation has two 'sides'. One is to present a story in five or less photographs, with the only admissible text being the story title. The other is responding to stories that are presented. Response 'can take many forms, such as a poetic or

prose rendering of the visualization, a critique on the structure of the story, comments on the photograph, or other constructive forms' (ibid.). The group page provides the rules of the game (e.g., 'A title is the only words that can be used. Rely on the photographs to bring the story to life'), quasi-technical instructions on how to submit a story, and some guidelines for telling a story. The guidelines distinguish different ways of telling a story – 'journalistic reporting, sequential photos that reveal a moment, photographic poetry and narrative' – and provide some guidelines for narrative, including a sequence of suggested 'roles' for a set of five photos (e.g., '1st photo: establish characters and location ... 5th photo: have a logical but surprising end').

Flickr presents a tricky case so far as identifying it as *a literacy* is concerned. From conventional standpoints it might look like a *smorgasbord* of literacies from which different participants select their particular 'mixes.' Some may spend almost all their time simply uploading photos and adding tags, titles and descriptions and, perhaps, responding to any comments they receive. Their main purpose might be to contribute to a global image archive in the public domain. Others, by contrast, might devote most of their energies to commenting on other people's photos. Others again may limit their activity purely to 'telling a story in five frames.' At the same time, they all fall under a general description of meaning making activity that we might call photo sharing. It is arguable that this is no more 'multiple' or 'hybridised' than letter writing or, even, a particular kind of letter writing like informal letter writing to friends and intimates. When we bundle 3 photographic prints into an envelope with a post it sticker that reads 'pix from the concert XXXXOOOO (kisses and hugs)' and mail it we are *letter writing* as much as when we spend an entire letter responding to a friend's description of their new romance.

Part of the issue here has to do with what one takes as the 'unit of analysis' for literacy. The nearer one is to a view of literacy that is exhausted by *text*, or some *mode* of text, the less plausible it is to regard photo sharing as a literacy. The nearer one is, however, to holding a full-fledged 'sociocultural practice' view of literacy the less implausible it seems. Participants recognize themselves engaging in the practice as a *whole*, without compartmentalizing it along the lines of 'Now I am commenting; ah, but now I am uploading an image; now I am tagging; now I am). Whatever we are doing at any point in time within this practice we are generating, communicating or negotiating meaningful content in recognized ways through the medium of encoded texts within contexts of participation in Discourses (or, as members of Discourses). That is, photo sharing is a literacy.

The 'technical stuff' of digital literacies like photo sharing checks in here, in the sense that we *click* for 'A' and we *click* for Red. We experience the practice holistically and seamlessly – moving in and out of different facets and functions – because it basically *is* holistic and seamless. The website itself and the templates involved – the technical stuff – make it so: click here and read a comment, and click here and add a comment, and click here and add a tag. With a set up like Flickr there are not even any multimodal complications around design choices for displaying photos: it is template governed. There are no layout issues or options to consider (Flickr even resizes one's photos automatically to fit the template as the photos are being uploaded). Decisions are limited to tags (not insignificant, but not exactly a science either at the level of folksonomic engagement), titles, and descriptions. In addition, of course, when conceived as a literacy in this way we can also readily see photosharing as a *coordination* or as an *element* in a coordination of identity. Who are you? (In part) 'I'm a Flickr person; I do Flickr'.

Flickr instantiates some other important facets of new literacies as we have discussed them here. For example, the points we made in relation to blogging about the sharing of expertise in the form of interfaces and templates that radically democratize participation and enable people with minimal knowledge, expertise, and confidence to join, apply equally to Flickr. So also do points about distributed expertise and having help and guidance at hand (cf., the guidelines for creating a story in five frames).

A further aspect concerns the fact that reading any internet text involves making a copy and, to that extent, raises potential copyright issues. The technical stuff and the ethos stuff of new literacies converge here. The second mindset relates the value of information to dispersal, and asserts the need to treat information differently from physical stuff as appropriate (cf., Lessig 2004). The work of people in ‘open source’ and ‘creative commons’ movements is vital for keeping some spaces free from proprietary constraints. Flickr has a potentially valuable role to play in the area of images, since it provides a way to build a massive database of images in the public domain free from restrictions upon use and permissions constraints. For people plagued by such concerns, including educators, authors and researchers, the participatory and collaborative spirit manifested in the public dimension of the Flickr community assumes great significance. When Flickr members designate their photos ‘public’ they are (consciously or unconsciously) participating in a progressive politics of information. They contribute to building a practice and a space steeped in values associated with the second (insider) mindset and, to that extent, opposed to the politics of proprietary information.

Finally, tagging is also part of what is new about photosharing on Flickr as a literacy. The meanings that participants assign to images through their selection of tags collectively become a ‘folksonomy’ (Davies 2006; also Chapter 2 above). Folksonomy is a collaborative categorization of content (images) that gives a fluid quality to meanings within a field, rather than classifying the components of that field into clear-cut, rigid categories. This kind of ‘fluidity’ resists centrally imposed classifications – it privileges ‘folk’ over ‘experts,’ is bottom-up rather than top-down, and is answerable to everyday ways of making sense and assigning meanings. As O’Reilly (2005: np) puts it, folksonomies allow for ‘retrieval [of content, information] along natural axes generated by user activity.’

Flickr’s data management procedures generate this evolving folksonomy as a ‘network effect from user contributions’ (ibid.). The network effect generated by Flickr’s tag-based folksonomy is *semantic*. This is potentially very important to the development of a ‘semantic web,’ in which searching and information retrieval is facilitated through the assignment of machine readable meaning to the content of material on the web. Whether folksonomic meanings will serve users well and what range of user interests they serve well, remains to be seen. At present there is no reason to believe they will not serve ‘folk’ interests well. And in a world where folk interests have for so long been subordinated to those most served by expert-generated meaning, that certainly represents something ‘new.’

In Part 2 we present detailed discussions of some *paradigm* cases of new literacies.