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'New' literacies: technologies and values[1]

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Abstract

It is too easy to make light of 'new literacies' by saying things like: "Well, there are always newer ones coming along". Such remarks suggest new literacies have a similar kind of life trajectory to an automobile: new in 2009, semi-new in 2010, and old hat by 2011. Against this kind of "that's so yesterday" perspective, we suggest in this article 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 an ascending social paradigm. From this perspective we suggest that the kinds of practices we currently identify as new literacies will cease to be 'new' once the social ways characterizing the ascending paradigm have become suf-

[1] The present article has been extracted and edited from the book "New Literacies" Third Edition, by Colin Lankshear and Michele Knobel. McGrawHill, Open University Press, 2011, chapter 3, pp. 51-92.

ficiently established and grounded to be regarded as *conventional*. Furthermore we suggest that at the heart of the idea of new ethos stuff is the idea of technological change aligning with a range of increasingly popular values.

Keywords

Collaborative work, copyright, multimodal text, new literacies, participatory culture, post-industrialism, real space, remixing.

Summary

Introduction: how long is 'new'?

Thinking about what is 'new' with respect to new literacies is challenging and important. It involves trying to understand how our conceptions and practices of literacy are changing in the midst of a far-reaching move away from one kind of social-economic-technological paradigm – and social order– and toward another.

The kind of transition we are talking about here is well recognized and spoken about in already familiar terms. These include the ideas of a transition from modern to postmodern worldviews and theories, from an industrial society and/or economy to post-industrial or information/knowledge societies and/or economies, from a conception of societies based on the model of autonomous but related nation-states toward an increasingly global configuration, and so on.

The 'post-' concept is handy here because it reminds us that we are not talking of absolute alternatives, complete breaks, or binary distinctions. Postmodernity is not a *displacement* of modernity, a move to something completely different. It is more like a *transcendence*, in which elements of an earlier state of affairs are carried over and reshaped to become parts of new configurations. Ideas and practices evolve rather than become displaced –as the failure of many attempts at revolutionary change attest.

We find revamped forms, say, of industrialism within post-industrialism. Technologies of industrial scale and type get transformed in ways that provide necessary and harmonious or coherent complements to digital electronic computing and communications technologies, and integrated into new styles and sets of practices. We do better here to think in terms of continua between the various dimensions of the different paradigms. These paradigms are constructions out of complex phenomena. They are attempts to 'summarize' broad trends and patterns evident in different times and places under different conditions. They are 'idealized types' that do not exist in pure form, and that are always 'more or less' along their varying dimensions: more of a tendency toward this emphasis or priority here, less of an emphasis or tendency there; varying amounts and degrees occurring from case to case and instance to instance; and always with traces of the former in the 'substance' of the later, or the 'post'. When we think about the current conjuncture in terms of a tendency away from one paradigm and more toward another, we think in terms of shifts in relative emphasis along the following kinds of continua (Table 3.1).

Modern/industrial paradigm	Postmodern/post-industrial/knowledge society paradigm
➔ Singular/Uniform	➔ Multiple
➔ Centred	➔ De-centred
➔ Monolithic	➔ Dispersed, modular
➔ Enclosed/Bounded	➔ Open/Unbounded
➔ Localized/Concentrated	➔ Distributed
➔ Stable/Fixed	➔ Dynamic/Fluid/Flexible
➔ Linear	➔ Non-linear
➔ 'Push'-oriented	➔ 'Pull'-oriented
➔ Individualized	➔ Joint/Collaborative/Collective

Under the first paradigm there is a tendency or a default toward thinking, acting, and organizing life around ideas of singularity, centredness, enclosure, individualization, and the like, whereas under the second paradigm there is a tendency toward thinking, acting, and organizing life around notions of multiplicity, flexibility, dispersion, non-linearity, and the like. This can be illustrated by reference to ways of thinking about and responding to people, to work, expertise, life trajectories, institutional roles and styles, and even about intelligence.

For example, until relatively recently it was typical to think of a person – an individual – in terms of a single identity, a core 'self', a more or less stable and permanent 'personality' of a particular 'type'. While we recognized that individuals were 'complex' to some extent and in some sense, we nonetheless tended to emphasize their particularity in 'character', point of view, and so on. Today we are much more inclined to think of people as much more complex; indeed, to make a fetish of this complexity. People see the world from *many* perspectives, depending on

which discourse they are 'in' or 'operating out of' within a particular situation or context. We speak of multiple subjectivities here, and think of identities as multiple and shifting.

Far from expecting people to manifest a singular abiding 'centre', we think more of people 'doing life' out of many Discourses, and of being able to move among many ways of thinking, speaking, valuing, judging, deciding, desiring, and acting. Not so long ago we thought in terms of individuals pursuing more or less linear life courses or trajectories, often within a more or less single location. The default norm was one job, one home, one family, one social class or status, etc., *for life*. For many, if not most, people living in modern (sub)urban environments this no longer holds. Increasingly, our default norm for life trajectories is complex and non-linear. Similarly, many authors and researchers have written about the 'new' capitalism (e.g., Reich, 1992) by mapping trends away from norms of production and distribution being located and organized in one place/country/site, around one core product or service, under the control or auspices of a single company, firm or corporation, with a specific infrastructure, and with stable roles, relationships, and responsibilities accompanying designated long-term positions within the workforce. The 'new' capitalism (Gee *et al*., 1996) or 'post-capitalism' (Drucker, 1993) is seen as organized materially around dispersed sites – often global – involving multiple companies, with workers often being hired for single projects or product runs, with flexible/shifting roles and responsibilities. The familiar norm of expertise residing in individual persons attached to different strata within the enterprise often gives way to the norm of distributed expertise and collective intelligence.

Similarly, John Hagel and John Seely Brown (2005) talk about how the different technologies associated with industrial modernity and postmodern knowledge societies respectively generate different common-sense models of how to mobilize scarce resources in order to get the things done that need to be done within societies. They talk of a shift away from a 'push' model of mobilizing resources toward more of a 'pull' model. This shift underpins very different institutional styles.[2]

These, obviously, are not just shifts in ideas and beliefs; they entail changes in *practices*. Life gets organized differently. The social ordering of work, domesticity, and leisure are recon-

[2] As we suggest in our account of social learning in the third edition of out book New Literacies (Lankshear and Knobel, 2011, chapter 7th).

stituted. Changes in one sphere or dimension of life ripple into changes elsewhere. People who previously never had to worry about résumés before, let alone keeping them updated and bolstered by project portfolios, now have to. People who need to be mobile must find new ways to maintain personal relationships and communicate. Sooner or later these changes 'show up' in the things we do and how we do them – including the literacies we enact and how we perform them. Improvising occurs on the fly; resources and services get 'mashed up' as people respond to contingencies. It is in the details of such intricacies and their shifts that we find the 'new'. And this 'new' endures over decades, not least because for many people the kinds of changes we may be somewhat familiar with are still somewhere away in the future, and 'late arrivals' are part of the frame and need to be accommodated.

In the midst of these recent and ongoing shifts toward 'reconstituting' and 'reconfiguring' everyday practices in patterned and identifiable ways, and to a greater or lesser extent from setting to setting, we find emerging and evolving ways of generating, communicating, and negotiating meanings via encoded texts; ways that become socially recognized well enough and for long enough to be identified as new literacies – not simply in and of themselves, but as elements of a larger abiding 'new'. That is, 'new' is not over on an 'instance by instance basis' when, for example, MOOs[3] 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, multiplayer collaborative gaming that includes real-time text chat, 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.

[3] A MOO is a text-based online virtual reality system to which multiple users (players) are connected at the same time (Wikipedia). It is the acronym of MUD Object Oriented, while MUD comes from Multi-User Dungeon.

'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). To this we might add that you also click for 'send' and click to retrieve. Basically, programmers draw on syntactic and semantic rules for a given programming language, along with a core library of commands, to create a series of commands that ultimately is stored as binary code (combinations of 0s and 1s) and which, in turn, drives different kinds of applications (for text, sound, image, digital video, word processing, animation, communications functions, etc.) or digital electronic apparatuses (computers, printers, games hardware, CD and MP3 player interfaces, etc.). Someone with access to a fairly standard computer or other mobile digital device and internet connection, and who has some basic knowledge of standard software applications can create a diverse range of meaningful artifacts using a strictly finite set of physical operations or techniques (keying, clicking, selecting, copying, dragging), in a relatively 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, and receive feedback on this text, almost immediately. The text could be a photoshopped image posted to Flickr.com or to Worth1000.com. It could be an animated birthday card sent to a close friend. It could be a short animated film sequence using toys and objects found at home, complete with an original music soundtrack, embedded within a blog post. It could be a slide presentation of images of some event with narrated commentary, or edited video clips from a video game that spoof some aspect of popular culture or that retell some obscure literary work.

The technical stuff of new literacies is part and parcel of generating, communicating, and negotiating encoded meanings by providing a range of new or more widely accessible resource possibilities ('affordances') for making meaning. The technical dimensions of digital technologies greatly enlarge ways of *generating* encoded meanings available to people in comparison with what we might call conventional literacies. Someone who would readily acknowledge not being able to draw or paint or take photos with any artistic or other merit whatsoever can, in a relatively short amount of time, create a collage of images and text to contribute to a popular online meme, such as the Sad Keanu meme where a paparazzi shot of a seemingly dejected-

looking Keanu Reeves (a movie actor) got placed in a range of other contexts in a show of solidarity with Reeves (see Know Your Meme 2010b[4]). Generating this kind of encoded text requires access to image editing software (such as is available at Gimp.org), some understanding of basic image editing 'moves' (like using the marquee tool by manipulating the mouse and click-and-drag actions to draw around and crop an image), using an image search engine to locate an appropriate new background image, knowing how to paste the cropped image onto a new background, using a blur or smudge tool to blend the cropped image into its new background, perhaps using the textbox function to add some text, then using a series of mouse clicks to upload the final image to a publicly shared online space; all in the space of ten minutes or so. In the past, even with access to a photography lab or printing outfit, or being extremely good with scissors and magazine images, this kind of high-quality, visually convincing collage or remix would have taken quite some time to produce and have been difficult to share with others on the scale now possible online.

The new technical stuff of digital technologies also has greatly expanded the possibilities for *communicating* encoded meanings. Email applications mean that a single message can now be sent to hundreds of people simultaneously, especially if one is a member of a large email discussion list, or accidentally sends a message to all co-workers at a large institution.

Social news sites like Reddit and Slashdot enable communicating directly with others from around the world (sometimes with the use of online translation services like Google Translate or Babelfish). To reprise an earlier example, it's now possible for a three-year-old girl to create a toy-based stop-motion animation and, with her father's help, post it to a video-sharing site like YouTube where – to date – it's been viewed over 9,000 times (see Thomas and Tufano 2010). This contrasts starkly with the conventional practice of pinning pre-schoolers' artworks to the fridge door for a few family members and friends to see. User-generated content hosting sites like YouTube (and Flickr, Panoramio, Blip.tv, Aniboom.com, Warcraftmovies.com), make it easy to share meanings across time and space, and even across languages and cultures. For example, in 2006, a self-recorded clip of a North American male lipsyncing and dancing to a Romanian pop song while remaining seated in his chair throughout caught on as a popular internet meme (Knobel and Lankshear, 2007). The performer's mobile facial expressions carried

[4] http://knowyourmeme.com/memes/keanu-is-sad-sad-keanu

much of the humour of this video, rather than anything said or sung. Countless blogs and discussion boards linked to the video – originally posted to YouTube – and it was reposted on various video hosting sites. Technically speaking, uploading to user-generated content sites is a matter of establishing an account with the service, accessing the upload function within the service, locating the file on one's computer or other digital device, and then perhaps writing some background or contextual details to accompany the uploaded file. Digital networks and hypertext markup language make it possible to link to the original video or embed it in other online spaces. In short, this kind of new technical stuff opens up myriad channels for communicating meanings across a broad spectrum of people and interests.

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 (in 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 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 *viceversa*) 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 (in Cope et al., 2005: 200).*

'Podcasting' provides another contemporary example. 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 mp3 player with recording functions, or a digital voice recorder, or even a laptop running sound-editing software with built-in recording options, like Audacity). Many 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, Garageband or Audacity, which maintains the fidelity of the recording (although there is some micro-restructuring of the sound that audiophiles attend to), but reduces the size of the file and makes it more 'playable' using a range of software applications and audio devices.

The podcaster uploads the digitally encoded audio mp3 file to a server, and embeds RSS (Really Simple Syndication) code so that subscribers to the podcast series are notified when a new podcast is available for downloading. Technically speaking, to podcast means that one posts audio files reasonably 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 podcaster's posted audio files. These aggregators – like gPodder.org, Miro (GetMiro.com), Juice (Juicereceiver. sourceforge.net), or iTunes, for example –will automatically check for and download newly posted podcasts that can be transferred to portable listening devices and played when convenient. Posting audio files online doesn't necessarily require RSS feeds and syndication, however. Our 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 (see also Shamburg, 2010).

The kinds of generative 'enabling' and 'sharing' involved in such examples remain quite revolutionary. Relatively unsophisticated home-based desktop publishing software can generate text and image effects that the best printers often could not manage under typographic condi-

tions. 'Publishing' is no longer limited to print or images on paper, but can also include additional media like voice recordings, music files, 2D and 3D animation, video, photoshopped images, and scanned images of paper-based artworks. Even the concept of 'text' as understood in conventional print terms becomes a hazy concept when considering the array of expressive media now available to everyday folk. Diverse practices of 'remixing' – where a range of existing 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 'ordinary people' can achieve.

Music can now be 'sampled' and 'remixed' using desktop computers and audio editing software. Software that comes bundled with most computers, or is otherwise easily downloaded from the internet, is all one needs for converting music files from a CD into a format that can be edited (e.g., wav), editing and splicing segments of different songs together, and converting the final music files back into a highly portable format (e.g., mp3) that can be uploaded to the internet for others to access, or used as background soundtracks in larger multimedia projects. The commercial sector has recognized the popularity of do-it-yourself music remixing, and music mix software packages like *MixPad*, *Cakewalk*, or *AV Music Morpher* can be acquired for the price of a video game. Programs that run on gameplaying machines, like *MTV Music Generator 3*: *This is the Remix* for PlayStation 2 and Xbox, are also available.

This *enabling* capacity of what essentially is binary code and associated hardware –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.

New technical stuff and copyright

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, 2008). It has to do with copyright and a fundamental difference between physical space (or what Lessig calls 'real space') and cyberspace.

Lessig (2004: 141–3) 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 or to sell it does not involve making a copy. But the 'ontology' of material available on the internet – 'a distributed digital network' (*ibid.*, 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)*

Lessig isn't against copyright –far from it. Rather, he argues for a 'scaled' approach to copyright that enables copyright owners to set the terms by which their work can (or cannot) be reused. This includes specifying, for example, that a work can be shared, remixed, or reused with attribution to the original work, but cannot be for profit, or can be used for commercial purposes, or can be reused but the resulting work must be made available for others to reuse, and so on (for more, see CreativeCommons.org). 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 books, Free Culture (2004) and Remix (2008), which reach the heart of pressing issues related to differences between paradigms distinguished earlier in this article and the 'worlds' to which they attach.

Lessig (2005, 2008) describes a range of digital remix practices like AMV (anime 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 anime cartoons and then video edit these to synchronize 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 Hemingway, "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 2005: n.p.).

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 (in interview with Koman 2005: n.p.), 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 'is just the same sort of stuff that we've always done with words' (2008: 82). Now, however,

> *[It's] not just words, but … images, film, and music. The technologies we give our kids give them a capacity to create that we never had. We've given them a world beyond words. This world is part of what I've called RW [read/write] culture. It is continuous with what has always been part of RW culture – the literacy of text. But it is more. It is the ability for amateurs to create in contexts that before only professionals ever knew* (*ibid.,*108).

Lessig makes two further, crucial, points with respect to the 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' (2005: n.p.). To this Lessig

adds the claim that this new writing needs the same freedoms as did the writing of the eighteenth, nineteenth and twentieth centuries. To do it well, he says, to understand how it works, to teach it, to develop it, and to practise it require 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 'democratizes a certain creative process' (Lessig, 2005:143). 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 to keep safe a 'creative commons' on which everyone can draw and to which everyone can contribute, and with that we agree entirely.

'New ethos stuff'

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 with in 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) – forms of what John Seely Brown and Richard Adler (2008) call social learning. While our interest here is wider than learning per se, many 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 describes affinity spaces as:

> *specially designed spaces (physical and virtual) constructed to resource people [who are] tied together … by a shared interest or endeavor … [For example, the] 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)* (Gee, 2004: 9, 73).

Affinity spaces instantiate participation, collaboration, distribution and dispersion of expertise, and relatedness (*ibid.*, Ch. 6th). These features are integral to the 'ethos stuff' of what we mean by 'new' literacies.

From Web 1.0 to Web 2.0

To grasp the significance of the idea of a new kind of *ethos* to the concept of new literacies, it is helpful to first get a sense of how various emphases, priorities, and values integral to the second social paradigm sketched above have come to play out in and through the very *architecture* of the web since the late 1990s. Just as the 'new' capitalism '*wrote*' values of collaboration, distributed expertise, collective intelligence, communities of practice, team orientation and the like into the very practices of work –and, hence, into the very *structure*, or social *order*– of many contemporary workplaces, so a number of pioneering organizations, companies, and individuals can be seen as having actively worked to develop a web architecture that supports social practices of many kinds and across many domains of everyday life grounded in these same values. The shift in web architecture captured in the familiar distinction between Web 1.0 and Web 2.0 can be seen as a specific concrete instance of the tendency toward thinking and acting, and otherwise organizing ways for doing everyday life – and, particularly, for doing literacies –around values central to the currently ascending social paradigm.

While the term 'Web 2.0' had been coined prior to the 2004 O'Reilly Media Web 2.0 conference, it was this conference, and Tim O'Reilly's (2005) subsequent account of distinct business models and web design principles operating in Web 1.0 and Web 2.0 respectively, that put 'Web 2.0' on the map. O'Reilly traces the origins of the distinction between Web 1.0 and Web 2.0 to discussions that addressed issues and ideas arising from the fall-out of the 2001 dotcom crash, including the observation that the major companies to survive the crash seemed to share some features in common. Parties to the initial discussions began assigning examples of internet applications and approaches to either a Web 1.0 list or a Web 2.0 list, and analysing their key distinguishing features. Using examples like the difference between Netscape and Google, and between Britannica Online and Wikipedia, participants focused on three key related differences. One is the difference between packaged software applications that operate on the desktop and software applications that are built and operate on the web. The second is between

web products and services (packages) that are basically consumed by users and those that enable and encourage forms of interactivity between producers and consumers, owners, and users. The third is the difference in business models between using web content to make product available to consumers, on one hand, and putting interactive software applications on the web so that users can help build or create the product. In the web 1.0 business model, producers create the product and make it available. In the Web 2.0 business model, customers or users actually help build the business for the 'owner', by using the software to generate content – such as ideas, data, texts, images, video content, etc. –that creates value, and where this value brings advantage to the 'owner' of the business. The key to this business model is *leverage*.

Competing configurations of 'new ethos stuff'

We have reached a point where it is necessary to draw some distinctions around the idea of 'a new ethos'. We began by talking about an ascending paradigm that reflects a different way of thinking about people, social practices and processes, and social phenomena like expertise and intelligence from how such things were thought about under an earlier paradigm. We have talked briefly about how, during recent decades, economic activity – work – has been re-described, understood, and re-structured along lines in which values of participation, collaboration, distributed systems (of expertise, intelligence, team-orientation) have been emphasized. The 'new' capitalism pursues new ways of identifying workers and giving them new identities, in association with new ways of organizing their activity (roles, relationships, performances), with a view to enhancing the economic viability of enterprises and bureaucracies (Gee et al. 1996). This is a new angle on an existing game – a new way to create economic value/profit/capital accumulation/ efficiency through *leverage*, within a process of coaxing employees to take on new identities as members of a 'community' rather than as individuals who just happen to work in this place, for this boss or this company. The end game remains more or less the same, but is now played under a new kind of 'ethos': by affiliates collaborating with each other in a shared mission.

We have described how this kind of business model and 'ethos' was named for the web: as Web 2.0. A new *architecture* established the web as an interactive platform whereby enterprises

could accumulate value by creating conditions and practices – *literacies*, no less – where users could generate value that companies/site proprietors could harness. This is Web 2.0 as a *business model*. At the same time, the architecture supporting this business model represents something of a shift in applied *ethos* from the more oneway, broadcast-oriented model retrospectively named Web 1.0. We worked our way through a staged sequence of selected examples, seeking to shift the focus from web-mediated collaborations and distributions grounded in leveraging user interactivity in the interests of the economic viability of an enterprise toward an emphasis on ways in which the impressive affordances of Web 2.0 as an interactive platform enable users to participate in *affinities*. These are affinities where their participation and collaboration enact relationships to/with others and their shared interests, and contribute collectively to building the affinity and a sense of membership in that affinity.

The examples we have used (among very many others that *could* have been used) bespeak rather different configurations of a broad ethos; different *configurations* of collaboration, participation, shared expertise, and the like. Some might say that it would be better to speak of distinct ethoses here, rather than different *configurations* of the same broad ethos. We prefer to think of different configurations, because what we believe is 'new' is bound up with the paradigm shift. The main thing, however, is to draw out what is at stake, and to consider how this might impact on how we choose to view the nature and scope of new literacies. A good place to start is with the following extended statement by Henry Jenkins (2010: 238–9), who says:

> *I want to hold onto a distinction between participatory cultures, which may or may not be engaged with commercial portals, and web 2.0, which refers specifically to a set of commercial practices that seek to capture and harness the creative energies and collective intelligences of their users. 'Web 2.0' is not a theory of pedagogy; it is a business model. Unlike projects like Wikipedia that have emerged from nonprofit organizations, the Open Courseware movement from educational institutions, and the Free Software movement from voluntary and unpaid affiliations, the web 2.0 companies follow a commercial imperative, however much they may also wish to facilitate the needs and interests of their consumer base. The more time we spend interacting with Facebook, YouTube, or LiveJournal, the clearer it becomes that there are real gaps between the interests of management and consumers. Academic theorists (Terranova, 2004; Green & Jenkins, 2009) have offered cogent critiques of*

> *what they describe as the 'free labor' provided by those who choose to contribute their time and effort to creating content which can be shared through such sites, while consumers and fans have offered their own blistering responses to shifts in the terms of service which devalue their contributions or claim ownership over the content they produced. Many Web 2.0 sites provide far less scaffolding and mentorship than offered by more grassroots forms of participatory culture. Despite a rhetoric of collaboration and community, they often still conceive of their users as autonomous individuals whose primary relationship is to the company that provides them services and not to each other.*

'Proprietary', 'projective' and 'participatory' forms of the new ethos

At one level we might distinguish forms or configurations of collaboration, participation, and distribution that are, respectively, more or less 'proprietary', 'projective', and 'participatory' in nature.

By '*proprietary*' we refer to cases where some property ownership is involved that accrues value for some party/parties but not for others. This would be the case with internet searching that consolidates Google's predominance and attracts it disproportionately massive advertising revenues. It might also be the case with writing reviews and assigning ratings with Amazon, where Amazon's bibliographic database, ratings and review systems, recommendations, etc., draw people to its site by default; or with participating in Facebook, contributing to YouTube, and so on. Of course, there is a trade-off, a certain reciprocity involved here. We get the benefits of having a powerful search tool available/they get our value addition; we get to express our opinion of products, voice our preferences, develop proficiency as reviewers, build a review profile and portfolio, build up an online identity/they get our value additions. There *is* a two-way flow of benefits here, albeit different in kind and the reciprocity might be 'unfair', even 'exploitative', in many cases. At the very least, users should become aware of the extent to which, ways in which, and times at which they are implicated in proprietary collaborations and participations, and do their moral or evaluative 'mathematics'.

Projective configurations of the new ethos are found where people participating in affinity spaces are doing so under the primary motivation of creating some kind of artifact to meet a personal (or joint) purpose, rather than from the motivation of further enhancing an affinity,

community of practice, fandom, or what Jenkins (2010: 233) calls 'collaborative enterprises within networked publics'. A typical example might be of someone spending time in music video spaces because they want to 'capture' and 'portray' their wedding anniversary as a music video. They may spend (considerable) time in online spaces seeking advice, looking at other people's work, rating or favouriting some of it, responding to and feeding back on the results of assistance provided and, eventually, posting their artifacts online – but all the while from the standpoint of wanting to further their quest to produce a worthy artifact, or to continue over an extended period of time to produce regular and increasingly sophisticated or proficient 'renditions' of personally significant events as music videos. The patterns of contributing and interacting within an online space from this kind of standpoint are likely to differ considerably from those, for example, of bonafide *fans* of particular genres of music videos.

Participatory configurations of the new ethos are intimated in the difference between someone who wants to create, say, a podcast for some kind of personal purpose or as a personal expression, and those whose podcasting activities arise from motivations like 'an urge to create a shared space where, for example, fans can discuss their mutual interests in Severus Snape, or where church members can hold prayer circles, or where comic book buffs can interview writers and artists' (Jenkins, 2010: 234). In other words, participation, collaboration, and distributed systems of expertise, knowledge/wisdom/intelligence and cultural production assume participatory forms within communities and networks of shared interests or affinities that have the kinds of characteristics associated with current conceptions of 'participation in affinity spaces' (Gee, 2004), 'participatory cultures' (Jenkins *et al*., 2006), 'communities of practice' (Lave and Wenger, 1991), and so on. These terms are widely used to capture the idea of networks and communities of shared interests where people associate, affiliate, and interact in kinds of 'collective enterprise' (Jenkins, 2010: 233) in order to pursue and go as deeply as they wish into their 'affinities' or what they are especially interested in. Such activity involves collectively building, resourcing, and maintaining interactive spaces, whether face to face, virtual, or mixes of both, where participants can contribute to and draw upon myriad resources and means for building and enacting identities based on interests, in collaboration with others. Participants play diverse roles and learn from each other 'in the process of working together to achieve shared goals'. From a new media literacies perspective, Jenkins and colleagues (2006: 3) define a participatory culture in terms of environments and social practices where there are

> *relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices. A participatory culture is also one in which members believe their contributions matter, and feel some degree of social connection with one another* (Jenkins *et al.,* 2006: 3)

The range here will typically be much greater and the priorities very different from those involved in engagements of a more proprietary and projective nature. This is because members of participatory cultures are involved in building and resourcing entire 'systems' and networks for developing and enacting identities (and ways of creative doing and being and making) within the very processes of pursuing and enacting these identities. They are collectively building, and developing the conditions and terrain for *their* interest-based engagements, as an entire enterprise, as distinct from participating in 'an enterprise of others' (proprietary), or drawing on established enterprises to engage in individual or personal goal-directed pursuits with no intrinsic or necessary investment in furthering the community, networks, or affinity space *per se*.

Lawrence Eng provides an illuminating glimpse of the spirit of participatory culture in *The Sasami Appreciation Society* (Capcorphq.com/SAS.html#Sasami). In the mid-1990s, Eng, studying at Cornell University in the USA and a member of the university's Japanese Animation Society, became captivated by the 'cutest, blue-haired anime girl I had ever seen' (webpage no longer available). This was Sasami from the *Tenchi Muyo* anime. 'I eagerly waited for each instalment of TM and was never disappointed. Through all of this my devotion to Sasami only increased,' says Eng. He found a kindred spirit online and they began to build *The Sasami Appreciation Society,* with the mission "to spread Sasami fandom in all ways possible, on the Net and otherwise". Why? It's simple; "it's our devotion to Sasami … We're dedicated to bringing her the fandom that she deserves."

In her account of literacy practices within the community of anime and manga fans, Mizuko Ito (2005a) identifies this spirit as the very heart of otaku culture. She speaks of anime otaku as 'media connoisseurs' and 'prosumer activists' who search for anime and manga content, and 'organize their social lives around viewing, interpreting, and remixing these media works' (ibid., n.p). More than this, they invest enormous time and energy to resourcing spaces for others as well as themselves.

> *[They] translate and subtitle all major anime works, they create web sites with hundreds and thousands of members, stay in touch 24/7 on hundreds of IRC channels, and create fan fiction, fan art, and anime music videos that rework the original works into sometimes brilliantly creative and often subversive alternative frames of reference … To support their media obsessions otaku acquire challenging language skills and media production crafts of scripting, editing, animating, drawing, and writing. And they mobilize socially to create their own communities of interest and working groups to engage in collaborative media production and distribution. Otaku use visual media as their source material for crafting their own identities, and as the coin of the realm for their social networks. Engaging with and reinterpreting professionally produced media is one stepping stone towards critical media analysis and alternative media production (ibid.).*

Before drawing the components of this article together into an account of new literacies, it is important to make three brief points with respect to participation and collaboration in relation to 'new ethos stuff' and the interactive web.

First, what we are calling a new ethos and, particularly, '*participatory*' cultural creative forms of new ethos, did not arise with the internet, let alone the Web 2.0 platform. (Jenkins traces participatory media cultures from the nineteenth century.) The key point here is that the possibilities and nature of participatory cultures are contingently related to many factors –including *technological* factors– conducive to interacting, sharing, building networks and relationships, and so on. The brute fact is that the interactive web has enlarged the possibilities for participatory cultural engagement on a mind-blowing and escalating scale. Moreover, various kinds of new literacies emerge and evolve and are appropriated in the course of building, resourcing, and engaging in such participatory culture.

Second, while we have distinguished between proprietary, projective, and participatory configurations of 'new ethos stuff', we should note that these are not 'pure', self-contained or mutually exclusive modes. They overlap considerably. During stretches of engagement in affinities involving new literacies, participants will almost inevitably move across moments of each – just as one moves across instrumental/intrinsic, commercial/subsistence, exchange value/use value modes within activities like gardening and shopping with a view to putting food on the table and creating an aesthetically satisfying home environment.

Third, the 'nuts and bolts' of participation and collaboration within the kinds of social practices under discussion here are, so to speak, of many 'shapes and sizes'. For example, the 'participation' and 'collaboration' involved with Google when we use Google's various search tools will for the most part be *tacit*, if not unwitting. We don't *search* with a view to collaborating and are rarely conscious of doing so. By contrast, when someone invests the kind of effort described by Eng and Ito, and in Black's (2008) accounts of reader reviews in fanfiction, collaboration is absolutely active and witting. Collaborations may be more or less targeted – e.g., responding to particular requests for help, information, or advice – or more or less 'diffuse', 'generic', or anonymous – e.g., just putting it out there in case it will meet someone's need some time. Instances of participation might be as 'small' as giving a rating or 'retweeting'. Someone's prevalent mode of participation might (simply) be rating or favouriting videos on a site, or commenting on blog posts. Participation might be 'peripheral' for long periods until one is knowledgeable or confident enough to take on more 'elaborate' forms. The point is that if terms like 'participation', 'collaboration', 'distributed expertise', and other aspects of the new ethos are to get beyond the level of slogans and cliché, and to serve as descriptive, theoretical, and analytic categories in our understanding of new literacies, we need to make these kinds of distinctions and recognize varying degrees, kinds, and gradations.

Conclusion: paradigm and peripheral cases of 'new' literacies

There can be no 'pure' conceptual account of 'new' literacies, any more than there can be of 'literacy' or 'literacies'. The stakes involved around competing views mean these concepts are 'essentially contested' (Gallie, 1956). At best, one can make a case for a preferred view. Our preferred view involves distinguishing between paradigm (strongest possible) and more peripheral less strong or 'complete' cases of new literacies.

We argue that *paradigm* cases of new literacies involve both new technical stuff and new ethos stuff. Under current and foreseeable conditions, failure to address the 'participation', 'transparency', and 'ethical' gaps framed by Jenkins and colleagues (Jenkins et al. 2006) will constitute a grave dereliction of commitment to democratic values. Even beginning to address these gaps presupposes recognizing the importance of keeping 'new ethos stuff' and 'new technical stuff' together in the frame. Moreover, we believe that the closer the 'new ethos' dimension

approximates to the forms of engagement, collaboration, sharing, and distributed expertise and 'authorship' that define 'participatory cultures' (*ibid*,), the more we should regard a literacy practice as 'new'. This involves a values stance based on an ideal of social learning that is actively undermined by existing educational arrangements and the wider social structures and arrangements they support (e.g., credentialing, differential allocation of scarce rewards, consumer commodity production, ownership and property relations, etc.). Paradigm cases of new literacies confront established social structures and relationships in ways we consider progressive, or 'better'. They are more inclusive, more egalitarian, more responsive to human needs, interests and satisfactions, and they model the ideal of people working together for collective good and benefit, rather than pitting individuals against one another in the cause of maintaining social arrangements that divide people radically along lines of success, status, wealth, and privilege.

At the same time, however, it is necessary to acknowledge the extent to which the kind of learning ideal portended by our second paradigm and championed – with variations –by diverse sociocultural and new media theorists *can* be pursued independently of 'new technical stuff' by putting the primary focus on the new ethos– even 'though the ideal is to do both' (Jenkins, 2010: 241). New technical stuff can be, and typically is, introduced into classrooms without challenging the established culture of classroom education one iota (Cuban, 2003; Lankshear and Knobel, 2006: Ch 2; Jenkins 2010). It is impossible, however, to engage with learning from the standpoint of participatory culture without seeing how its learning model challenges 'the cultural context that surrounds contemporary formal education' (Jenkins, 2010: 241).

Bibliography

Black, R. 2008 *Adolescents and Online Fan Fiction*. New York: Peter Lang.

Brown, J. S. and Adler, R. 2008. Minds on fire: open education, the long tail and Learning 2.0. *Educause Review*, January/February: 17–32.

Cope, B., Kalantzis, M. and Lankshear, C. 2005 A contemporary project: an interview. *E-Learning*, 22: 192–207. Available at: <http://www.wwwords.co.uk/elea/content/pdfs/2/issue2_2.asp#7> [Accessed 5 Dec. 2010].

Cuban, L. 2003 *Oversold and Underused: Computers in the Classroom*. Cambridge, MA: Harvard University Press.

Drucker, P. 1993 P*ost-capitalist Society*. New York: Harper.

Gallie, W. B. 1956 Essentially contested concepts. *Proceedings of the Aristotelian Society*, 56: 167–98.

Gee, J. P. 2004 *Situated Language and Learning: A Critique of Traditional Schooling*. London: Routledge.

Gee, J. P., Hull, G. and Lankshear, C. 1996 *The New Work Order: Behind the Language of the New Capitalism*. Sydney: Allen and Unwin.

Green, J. and Jenkins, H. 2009 The moral economy of Web 2.0: audience research and convergence culture. In J. Holt and A. Perren eds *Media Industries: History, Theory and Methods*. New York: Wiley-Blackwell, pp. 213–25.

Hagel, J. and Brown, J.S. 2005 From push to pull: emerging models for mobilizing resources. Unpublished working paper, October. Available at: <http://edgeperspectives.com> [Accessed 21 Jan. 2010].

Ito, M. 2005a Personal, portable, pedestrian: lessons from Japanese mobile phone use, *Japan Focus*, 30 October. Available at: <http://www.japanfocus.org/article.asp?id=434> [Accessed 16 Feb. 2006].

Jenkins, H. 2010 Afterword. In M. Knobel and C. Lankshear eds D*IY Media: Creating, Sharing and Learning with New Technologies*. New York: Peter Lang, pp. 231–53.

Jenkins,H., with R. Purushotma, K. Clinton, M. Weigel and A. Robison 2006 *Confronting the Challenge of Participatory Culture: Media Education for the 21st Century*. Occasional Paper. Boston, MA: MIT/MacArthur Foundation.

KNOBEL, M. and LANKSHEAR, C. 2007 Online memes, affinities and cultural production. In M. Knobel and C. Lankshear eds *A New Literacies Sampler*. New York: Peter Lang, pp. 199–227.

KNOBEL, M. and LANKSHEAR, C. 2008 Digital literacy and participation in online social networking spaces. In C. Lankshear and M. Knobel eds *Digital Literacies: Concepts, Policies and Practices*. New York: Peter Lang, pp. 249–78.

KOMAN, R. 2005 Remixing culture: an interview with Lawrence Lessig. Available at: <http://oreillynet.com/pub/a/policy/2005/02/24/lessig.html> [Accessed 22 Apr. 2006].

LANKSHEAR, C. and KNOBEL, M. 2006 *New Literacies: Everyday Practices and Classroom Learning*, 2nd edition. Maidenhead: Open University Press.

LANKSHEAR, C. and KNOBEL, M. 2011 *New Literacies* Third edition. McGraw Hill. Open University Press.

LAVE, J. and WENGER, E. 1991 *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

LESSIG, L. 2004 *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. New York: Penguin.

LESSIG, L. 2005 Re:Mix:Me. Plenary address to the annual Network for IT-Research and Competence in Education ITU conference, Oslo, Norway. October.

LESSIG, L. 2008 *Remix: Making Art and Commerce Thrive in the Hybrid Economy*. New York: The Penguin Press.

O'REILLY, T. 2005 What is Web 2.0?: Design patterns and business models for the next generation of software. Available at: <http://oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web–20.html> [Accessed 4 April 2006].

REICH, R. 1992 *The Work of Nations: Preparing Ourselves for 21st Century Capitalism*. New York: Vintage.

SHAMBURG, C. 2010 DIY podcasting in education. In M. Knobel and C. Lankshear eds *DIY Media: Creating, Sharing and Learning with New Technologies*. New York: Peter Lang, pp. 51–75.

TERRANOVA, T. 2004 *Network Culture: Politics for the Information Age*. London: Pluto Press.

THOMAS, A. and TUFANO, N. 2010 Stop motion animation. In M. Knobel and C. Lankshear eds *DIY Media: Creating, Sharing and Learning with New Technologies*. New York: Peter Lang, pp. 161–83.