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# Looking across the Hearing Line?: Exploring Young Deaf People's Use of Web 2.0

[Nicole Matthews, Sherman Young, David Parker, Jemina Napier](#) **Volume 13 Issue 3 June 2010 'deaf'**

## Introduction

New digital technologies hold promise for equalising access to information and communication for the Deaf community. SMS technology, for example, has helped to equalise deaf peoples' access to information and made it easier to communicate with both deaf and hearing people (Tane Akamatsu et al.; Power and Power; Power, Power, and Horstmanshof; Valentine and Skelton, "Changing", "Umbilical"; Harper). A wealth of anecdotal evidence and some recent academic work suggests that new media technology is also reshaping deaf peoples' sense of local and global community (Breivik "Deaf"; Breivik, *Deaf*; Brueggeman). One focus of research on new media technologies has been on technologies used for point to point communication, including communication (and interpretation) via video (Tane Akamatsu et al.; Power and Power; Power, Power, and Horstmanshof). Another has been the use of multimedia technologies in formal educational setting for pedagogical purposes, particularly English language literacy (e.g. Marshall Gentry et al.; Tane Akamatsu et al.; Vogel et al.). An emphasis on the role of multimedia in deaf education is understandable, considering the on-going highly politicised contest over whether to educate young deaf people in a bilingual environment using a signed language (Swanwick & Gregory). However, the increasing significance of social and participatory media

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in the leisure time of Westerners suggests that such uses of Web 2.0 are also worth exploring. There have begun to be some academic accounts of the enthusiastic adoption of vlogging by sign language users (e.g. Leigh; Cavander and Ladner) and this paper seeks to add to this important work.

Web 2.0 has been defined by its ability to, in Denise Woods' word, "harness collective intelligence" (19.2) by providing opportunities for users to make, adapt, "mash up" and share text, photos and video. As well as its well-documented participatory possibilities (Bruns), its re-emphasis on visual (as opposed to textual) communication is of particular interest for Deaf communities. It has been suggested that deaf people are a 'visual variety of the human race' (Bahan), and the visually rich presents new opportunities for visually rich forms of communication, most importantly via signed languages. The central importance of signed languages for Deaf identity suggests that the visual aspects of interactive multimedia might offer possibilities of maintenance, enhancement and shifts in those identities (Hyde, Power and Lloyd). At the same time, the visual aspects of the Web 2.0 are often audio-visual, such that the increasingly rich resources of the net offer potential barriers as well as routes to inclusion and community (see Woods; Ellis; Cavander and Ladner). In particular, lack of captioning or use of Auslan in video resources emerges as a key limit to the accessibility of the visual Web to deaf users (Cahill and Hollier). In this paper we ask to what extent contemporary digital media might create moments of permeability in what Krentz has called "the hearing line, that invisible boundary separating deaf and hearing people"( 2)". To provide tentative answers to these questions, this paper will explore the use of participatory digital media by a group of young Deaf people taking part in a small-scale digital moviemaking project in Sydney in 2009.

## The Project

As a starting point, the interdisciplinary research team conducted a video-making course for young deaf sign language users within the Department of Media, Music and Cultural Studies at Macquarie University. The research team was comprised of one deaf and four hearing researchers, with expertise in media and cultural studies, information technology, sign language linguistics/ deaf studies, and signed language interpreting. The course was advertised through the newsletter of partner organization the NSW Deaf Society, via a Sydney bilingual deaf school and through the dense electronic networks of Australian deaf people.

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The course attracted fourteen participants from NSW, Western Australia and Queensland ranging in age from 10 to 18. Twelve of the participants were male, and two female. While there was no aspiration to gather a representative group of young people, it is worth noting there was some diversity within the group: for example, one participant was a wheelchair user while another had in recent years moved to Sydney from Africa and had learned Auslan relatively recently. Students were taught a variety of storytelling techniques and video-making skills, and set loose in groups to devise, shoot and edit a number of short films. The results were shared amongst the class, posted on a private YouTube channel and made into a DVD which was distributed to participants.

The classes were largely taught in Auslan by a deaf teacher, although two sessions were taught by (non-deaf) members of Macquarie faculty, including an AFI award winning director. Those sessions were interpreted into Auslan by a sign language interpreter. Participants were then allowed free creative time to shoot video in locations of their choice on campus, or to edit their footage in the computer lab. Formal teaching sessions lasted half of each day – in the afternoons, participants were free to use the facilities or participate in a range of structured activities. Participants were also interviewed in groups, and individually, and their participation in the project was observed by researchers.

Our research interest was in what deaf young people would choose to do with Web 2.0 technologies, and most particularly the visually rich elements of participatory and social media, in a relatively unstructured environment. Importantly, our focus was not on evaluating the effectiveness of multimedia for teaching deaf young people, or the level of literacy deployed by deaf young people in using the applications. Rather we were interested to discover the kinds of stories participants chose to tell, the ways they used Web 2.0 applications and the modalities of communication they chose to use. Given that Auslan was the language of instruction of the course, would participants draw on the tradition of deaf jokes and storytelling and narrate stories to camera in Auslan? Would they use the format of the “mash-up”, drawing on found footage or photographs? Would they make more filmic movies using Auslan dialogue? How would they use captions and text in their movies: as subtitles for Auslan dialogue? As an alternative to signing? Or not at all?

Our observations from the project point to the great significance of the visual

dimensions of Web 2.0 for the deaf young people who participated in the project. Initially, this was evident in the kind of movies students chose to make. Only one group – three young people in their late teens which included both of the young women in the class - chose to make a dialogue heavy movie, a spoof of *Charlie's Angels*, entitled *Deaf Angels*. This movie included long scenes of the Angels using Auslan to chat together, receiving instruction from "Charlie" in sign language via videophone and recruiting "extras", again using Auslan, to sign a petition for Auslan to be made an official Australian language. In follow up interviews, one of the students involved in making this film commented "my clip is about making a political statement, while the other [students in the class] made theirs just for fun".

The next group of (three) films, all with the involvement of the youngest class member, included signed storytelling of a sort readily recognisable from signed videos on-line: direct address to camera, with the teller narrating but also taking on the roles of characters and presenting their dialogue directly via the sign language convention of "role shift" - also referred to as constructed action and constructed dialogue (Metzger). One of these movies was an interesting hybrid. The first half of the four minute film had two young actors staging a hold-up at a vending machine, with a subsequent chase and fight scene. Like most of the films made by participants in the class, it included only one line of signed dialogue, with the rest of the narrative told visually through action. However, at the end of the action sequence, with the victim safely dead, the narrative was then retold by one of the performers within a signed story, using conventions typically observed in signed storytelling - such as role shift, characterisation and spatial mapping (Mather & Winston; Rayman; Wilson).

The remaining films similarly drew on action and horror genres with copious use of chase and fight scenes and melodramatic and sometimes quite beautiful climactic death tableaux. The movies included a story about revenging the death of a brother; a story about escaping from jail; a short story about a hippo eating a vet; a similar short comprised of stills showing a sequence of executions in the computer lab; and a ghost story. Notably, most of these movies contained very little dialogue – with only one or two lines of signed dialogue in each four to five minute video (with the exception of the gun handshake used in context to represent the object liberally throughout most films).

The kinds of movies made by this limited group of people on this one occasion are

suggestive. While participants drew on a number of genres and communication strategies in their film making, the researchers were surprised at how few of the movies drew on traditions of signed storytelling or jokes– particularly since the course was targeted at deaf sign language users and promoted as presented in Auslan. Consequently, our group of students were largely drawn from the small number of deaf schools in which Auslan is the main language of instruction – an exceptional circumstance in an Australian setting in which most deaf young people attend mainstream schools (Byrnes et al.; Power and Hyde).

## Looking across the Hearing Line

We can make sense of the creative choices made by the participants in the course in a number of ways. Although methods of captioning were briefly introduced during the course, iMovie (the package which participants were using) has limited captioning functionality. Indeed, one student, who was involved in making the only clip to include captioning which contextualised the narrative, commented in follow-up interviews that he would have liked more information about captioning. It's also possible that the compressed nature of the course prevented participants from undertaking the time-consuming task of scripting and entering captions. As well as being the most fun approach to the projects, the use of visual story telling was probably the easiest. This was perhaps exacerbated by the lack of emphasis on scriptwriting (outside of structural elements and broad narrative sweeps) in the course. Greater emphasis on that aspect of film-making would have given participants a stronger foundational literacy for caption-based projects

Despite these qualifications, both the movies made by students and our observations suggest the significance of a shared visual culture in the use of the Web by these particular young people. During an afternoon when many of the students were away swimming, one student stayed in the lab to use the computers. Rather than working on a video project, he spent time trawling through YouTube for clips purporting to show ghost sightings and other paranormal phenomena. He drew these clips to the attention of one of the research team who was present in the lab, prompting a discussion about the believability of the ghosts and supernatural apparitions in the clips. While some of the clips included (uncaptioned) off-screen dialogue and commentary, this didn't seem to be a barrier to this student's enjoyment. Like many other sub-genres of YouTube clips – pranks, pratfalls, cute or alarmingly dangerous incidents involving children and animals – these supernatural videos as a genre rely very little on commentary or dialogue for their meaning –

just as with the action films that other students drew on so heavily in their movie making.

In an E-Tech paper entitled "The Cute Cat Theory of Digital Activism", Ethan Zuckerman suggests that "web 1.0 was invented to allow physicists to share research papers and web 2.0 was created to allow people to share pictures of cute cats". This comment points out both the Web 2.0's vast repository of entertaining material in the 'funny video' genre which is visually based, dialogue free, entertaining material accessible to a wide range of people, including deaf sign language users. In the realm of leisure, at least, the visually rich resources of Web 2.0's ubiquitous images and video materials may be creating a shared culture in which the line between hearing and deaf people's entertainment activities is less clear than it may have been in the past. The ironic tone of Zuckerman's observation, however, alerts us to the limits of a reliance on language-free materials as a route to accessibility.

The kinds of videos that the participants in the course chose to make speaks to the limitations as well as resources offered by the visual Web. There is still a limited range of captioned material on You Tube. In interviews, both young people and their teachers emphasised the central importance of access to captioned video on-line, with the young people we interviewed strongly favouring captioned video over the inclusion on-screen of simultaneous signed interpretations of text. One participant who was a regular user of a range of on-line social networking commented that if she really liked the look of a particular movie which was uncaptioned, she would sometimes contact its maker and ask them to add captions to it.

Interestingly, two student participants emphasised in interviews that signed video should also include captions so hearing people could have access to signed narratives. These students seemed to be drawing on ideas about "reverse discrimination", but their concern reflected the approach of many of the student movies - using shared visual conventions that made their movies available to the widest possible audience. All the students were anxious that hearing people could understand their work, perhaps a consequence of the course's location in the University as an overwhelmingly hearing environment. In this emphasis on captioning rather than sign as a route to making media accessible, we may be seeing a consequence of the emphasis Krentz describes as ubiquitous in deaf education "the desire to make the differences between deaf and hearing people

recede" (16).

Krentz suggests that his concept of the 'hearing line' "must be perpetually retested and re-examined. It reveals complex and shifting relationships between physical difference, cultural fabrication and identity" (7). The students' movies and attitudes emphasised the reality of that complexity. Our research project explored how some young Deaf people attempted to create stories capable of crossing categories of deafness and 'hearing-ness'... unstable (like other identity categories) while others constructed narratives that affirmed Deaf Culture or drew on the Deaf storytelling traditions. This is of particular interest in the Web 2.0 environment, given that its technologies are often lauded as having the politics of participation. The example of the Deaf Community asks reasonable questions about the validity of those claims, and it's hard to escape the conclusion that there is *still* less than appropriate access and that some users are more equal than others.

How do young people handle the continuing lack of material available to them on the Web? The answer repeatedly offered by our young male interviewees was 'I can't be bothered'. As distinct from "I can't understand" or "I won't go there" this answer, represented a disengagement from demands to identify your literacy levels, reveal your preferred means of communication; to rehearse arguments about questions of access or expose attempts to struggle to make sense of texts that fail to employ readily accessible means of communicating. Neither an admission of failure or a demand for change, CAN'T-BE-BOTHERED in this context offers a cool way out of an accessibility impasse. This easily-dismissed comment in interviews was confirmed in a whole-group discussion, when students came to a consensus that if when searching for video resources on the Net they found video that included neither signing nor captions, they would move on to find other more accessible resources. Even here, though, the ground continues to shift. YouTube recently announced that it was making its auto-captioning feature open to everybody - a machine generated system that whilst not perfect does attempt to make all YouTube videos accessible to deaf people. (Bertolucci).

The importance of captioning of non-signed video is thrown into further significance by our observation from the course of the use of YouTube as a search engine by the participants. Many of the students when asked to research information on the Web bypassed text-based search engines and used the more visual results presented on YouTube directly. In research on deaf adolescents' search strategies on the Internet, Smith points to the promise of graphical interfaces for deaf young people

as a strategy for overcoming the English literacy difficulties experienced by many deaf young people (527). In the years since Smith's research was undertaken, the graphical and audiovisual resources available on the Web have exploded and users are increasingly turning to these resources in their searches, providing new possibilities for Deaf users (see for instance Schonfeld; Fajardo et al.).

## Preliminary Conclusions

A number of recent writers have pointed out the ways that the internet has made everyday communication with government services, businesses, workmates and friends immeasurably easier for deaf people (Power, Power and Horstmanshof; Keating and Mirus; Valentine and Skelton, "Changing", "Umbilical"). The ready availability of information in a textual and graphical form on the Web, and ready access to direct contact with others on the move via SMS, has worked against what has been described as deaf peoples' "information deprivation", while everyday tasks – booking tickets, for example – are no longer a struggle to communicate face-to-face with hearing people (Valentine and Skelton, "Changing"; Bakken 169-70).

The impacts of new technologies should not be seen in simple terms, however. Valentine and Skelton summarise: "the Internet is not producing either just positive or just negative outcomes for D/deaf people but rather is generating a complex set of paradoxical effects for different users" (Valentine and Skelton, "Umbilical" 12). They note, for example, that the ability, via text-based on-line social media to interact with other people on-line regardless of geographic location, hearing status or facility with sign language has been highly valued by some of their deaf respondents. They comment, however, that the fact that many deaf people, using the Internet, can "pass" minimises the need for hearing people in a phonocentric society to be aware of the diversity of ways communication can take place. They note, for example, that "few mainstream Websites demonstrate awareness of D/deaf peoples' information and communication needs/preferences (eg. by incorporating sign language video clips)" ("Changing" 11). As such, many deaf people have an enhanced ability to interact with a range of others, but in a mode favoured by the dominant culture, a culture which is thus unchallenged by exposure to alternative strategies of communication.

Our research, preliminary as it is, suggests a somewhat different take on these complex questions. The visually driven, image-rich approach taken to movie making, Web-searching and information sharing by our participants suggests the

emergence of a certain kind of on-line culture which seems likely to be shared by deaf and hearing young people. However where Valentine and Skelton suggest deaf people, in order to participate on-line, are obliged to do so, on the terms of the hearing majority, the increasingly visual nature of Web 2.0 suggests that the terrain may be shifting – even if there is still some way to go.

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## References

Bahan, B. "Upon the Formation of a Visual Variety of the Human Race. In H-Dirksen L. Baumann (ed.), *Open Your Eyes: Deaf Studies Talking*. London: University of Minnesota Press, 2007.

Bakken, F. "SMS Use among Deaf Teens and Young Adults in Norway." In R. Harper, L. Palen, and A. Taylor (eds.), *The Inside Text: Social, Cultural and Design Perspectives on SMS*. Netherlands: Springer, 2005. 161-74.

Berners-Lee, Tim. *Weaving the Web*. London: Orion Business, 1999.

Bertolucci, Jeff. "YouTube Offers Auto-Captioning to All Users." *PC World* 5 Mar. 2010. 5 Mar. 2010 < [http://www.macworld.com/article/146879/2010/03/YouTube\\_captions.html](http://www.macworld.com/article/146879/2010/03/YouTube_captions.html) >.

Breivik, Jan Kare. *Deaf Identities in the Making: Local Lives, Transnational Connections*. Washington, D.C.: Gallaudet University Press, 2005.

———. "Deaf Identities: Visible Culture, Hidden Dilemmas and Scattered Belonging." In H.G. Sicakkan and Y.G. Lithman (eds.), *What Happens When a Society Is Diverse: Exploring Multidimensional Identities*. Lewiston, New York: Edwin Mellen Press, 2006. 75-104.

Brueggemann, B.J. (ed.). *Literacy and Deaf People's Cultural and Contextual Perspectives*. Washington, DC: Gaudellet University Press, 2004.

Bruns, Axel. *Blogs, Wikipedia, Second Life and Beyond: From Production to Producers*. New York: Peter Lang, 2008.

Byrnes, Linda, Jeff Sigafoos, Field Rickards, and P. Margaret Brown. "Inclusion of Students Who Are Deaf or Hard of Hearing in Government Schools in New South Wales, Australia: Development and Implementation of a Policy." *Journal of Deaf Studies and Deaf Education* 7.3 (2002): 244-257.

Cahill, Martin, and Scott Hollier. *Social Media Accessibility Review 1.0*. Media Access Australia, 2009.

Cavender, Anna, and Richard Ladner. "Hearing Impairments." In S. Harper and Y. Yesilada (eds.), *Web Accessibility*. London: Springer, 2008.

Ellis, Katie. "A Purposeful Rebuilding: YouTube, Representation, Accessibility and the Socio-Political Space of Disability." *Telecommunications Journal of Australia* 60.2 (2010): 1.1-21.12.

Fajardo, Inmaculada, Elena Parra, and Jose J. Canas. "Do Sign Language Videos Improve Web Navigation for Deaf Signer Users?" *Journal of Deaf Studies and Deaf Education* 15.3 (2009): 242-262.

Harper, Phil. "Networking the Deaf Nation." *Australian Journal of Communication* 30.3 (2003): 153-166.

Hyde, M., D. Power, and K. Lloyd. "W(h)ither the Deaf Community? Comments on Trevor Johnston's Population, Genetics and the Future of Australian Sign Language." *Sign Language Studies* 6.2 (2006): 190-201.

Keating, Elizabeth, and Gene Mirus. "American Sign Language in Virtual Space: Interactions between Deaf Users of Computer-Mediated Video." *Language in Society* 32.5 (Nov. 2003): 693-714.

Krentz, Christopher. *Writing Deafness: The Hearing Line in Nineteenth-Century Literature*. Chapel Hill, NC: University of North Carolina Press, 2007.

Leigh, Irene. *A Lens on Deaf Identities*. Oxford: Oxford UP. 2009.

Marshall Gentry, M., K.M. Chinn, and R.D. Moulton. "Effectiveness of Multimedia Reading Materials When Used with Children Who Are Deaf." *American Annals of the Deaf* 5 (2004): 394-403.

Mather, S., and E. Winston. "Spatial Mapping and Involvement in ASL Storytelling." In C. Lucas (ed.), *Pinky Extension and Eye Gaze: Language Use in Deaf Communities*. Washington, DC: Gallaudet University Press, 1998. 170-82.

Metzger, M. "Constructed Action and Constructed Dialogue in American Sign Language." In C. Lucas (ed.), *Sociolinguistics in Deaf Communities*. Washington, DC: Gallaudet University Press, 1995. 255-71.

Power, Des, and G. Leigh. "Principles and Practices of Literacy Development for Deaf Learners: A Historical Overview." *Journal of Deaf Studies and Deaf Education* 5.1 (2000): 3-8.

Power, Des, and Merv Hyde. "The Characteristics and Extent of Participation of Deaf and Hard-of-Hearing Students in Regular Classes in Australian Schools." *Journal of Deaf Studies and Deaf Education* 7.4 (2002): 302-311.

Power, M., and D. Power "Everyone Here Speaks TXT: Deaf People Using SMS in Australia and the Rest of the World." *Journal of Deaf Studies and Deaf Education* 9.3 (2004).

Power, M., D. Power, and L. Horstmanshof. "Deaf People Communicating via SMS, TTY, Relay Service, Fax, and Computers in Australia." *Journal of Deaf Studies and Deaf Education* 12.1 (2007): 80-92.

Rayman, J. "Storytelling in the Visual Mode: A Comparison of ASL and English." In E. Wilson (ed.), *Storytelling & Conversation: Discourse in Deaf Communities*. Washington, DC: Gallaudet University Press, 2002. 59-82.

Schonfeld, Eric. "ComScore: YouTube Now 25 Percent of All Google Searches." *Tech Crunch* 18 Dec. 2008. 14 May 2009 < <http://www.techcrunch.com/2008/12/18/comscore-YouTube-now-25-percent-of-all-google-searches/?rss> >.

Smith, Chad. "Where Is It? How Deaf Adolescents Complete Fact-Based Internet Search Tasks." *American Annals of the Deaf* 151.5 (2005-6).

Swanwick, R., and S. Gregory (eds.). *Sign Bilingual Education: Policy and Practice*. Coleford: Douglas McLean Publishing, 2007.

Tane Akamatsu, C., C. Mayer, and C. Farrelly. "An Investigation of Two-Way Text Messaging Use with Deaf Students at the Secondary Level." *Journal of Deaf Studies and Deaf Education* 11.1 (2006): 120-131.

Valentine, Gill, and Tracy Skelton. "Changing Spaces: The Role of the Internet in Shaping Deaf Geographies." *Social and Cultural Geography* 9.5 (2008): 469-85.

———. "'An Umbilical Cord to the World': The Role of the Internet in D/deaf People's Information and Communication Practices." *Information, Communication and Society* 12.1 (2009): 44-65.

Vogel, Jennifer, Clint Bowers, Cricket Meehan, Raegan Hoeft, and Kristy Bradley. "Virtual Reality for Life Skills Education: Program Evaluation." *Deafness and Education International* 61 (2004): 39-47.

Wilson, J. "The Tobacco Story: Narrative Structure in an ASL Story." In C. Lucas (ed.), *Multicultural Aspects of Sociolinguistics in Deaf Communities*. Washington, DC: Gallaudet University Press, 1996. 152-80.

Winston (ed.). *Storytelling and Conversation: Discourse in Deaf Communities*. Washington, D.C: Gallaudet University Press. 59-82.

Woods, Denise. "Communicating in Virtual Worlds through an Accessible Web 2.0 Solution." *Telecommunications Journal of Australia* 60.2 (2010): 19.1-19.16

YouTube Most Viewed. Online video. YouTube 2009. 23 May 2009 < <http://www.>

[YouTube.com/browse?s=mp&t=a](https://www.youtube.com/browse?s=mp&t=a) >.



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