Abstract: In the digital age visual literacy is becoming integral to journalism education. As the production and reception of the screen shifts from an analogue world to a digital constellation, the significance of visual literacy begs to be addressed. While recognizing that traditionally, areas such as television journalism have always worked in tandem with camera operators and vision editors to re-present people and circumstances; the digital age ought to be understood within the context of shifting workplace expectations. Ours is a screen-induced society, around 99 percent of Australian babies are born into a world where, from sunrise through the days of our lives they increasingly observe their friends and neighbours both home and away via TV, PC, MP3 and mobile phone. In this multi-screen entertainment infused environment, production departments have shrunk. Consequently, the digital journalist is increasingly called upon to communicate as both wordsmith and image-maker. As the moving image increasingly underscores the viewer's screen-based experience from cradle to grave, journalism education would do well to acknowledge how screen-based media attracts, maintains and informs the audience at a time when individual journalists have less access to production personnel.
Visual Literacy, Journalism and the Digital Age
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Abstract
In the Digital Age visual literacy is becoming integral to journalism education. As the production and reception of the screen shifts from an analogue world to a digital constellation, the significance of visual literacy begs to be addressed. While recognizing that traditionally, areas such as television journalism have always worked in tandem with camera operators and vision editors to re-present people and circumstances; the Digital Age ought to be understood within the context of shifting workplace expectations. Ours is a screen-induced society, around 99% of Australian babies are born into a world where, from sunrise through the days of our lives they increasingly observe their friends and neighbours both home and away via TV, PC, MP3 and mobile phone. In this multi-screen entertainment infused environment, production departments have shrunk. Consequently, the digital journalist is increasingly called upon to communicate as both wordsmith and image-maker. As the moving image increasingly underscores the viewer’s screen-based experience from cradle to grave, journalism education would do well to acknowledge how screen-based media attracts, maintains and informs the audience at a time when individual journalists have less access to production personnel.
Introduction

If you can’t deal with screen language, you are not literate.

(Bleed, 2005).

Twenty-five years after the introduction of the personal computer, the iconic image of a reporter with ‘pencil and notepad’ is no longer the sole symbol of journalistic literacy. Print Journalism faces the reality that on-line news sources such as theaustralian.news.com.au are steadily adding video, animation and multimedia to their information suite. The Digital Age is also affecting broadcast journalism, television journalists are increasingly required to edit news stories; in some instances they are required to video the story. Hence, print and broadcast journalism graduates require skills in visual literacy.

This paper endorses the research of Nankervis (2006) and Tanner and Duhé (2005) revealing how both educators and industry stress the importance of basic writing skills over media convergence skills; to this end, managing editor of the Riverina Group, Paul McLoughlin (2006) argues that 8 out of 10 graduates will end up working for newspapers or at least providing information in the written form — that said, this paper argues that many of these print, on-line and television journalists are increasingly required to produce image-based information in addition to text based information. Hence, any confusion between convergence skills and visual literacy need to be put to rest; the following discussion is not about convergence skills or about teaching journalism students what software menu to select or button to push; rather, the discussion is about the central nature of visual literacy in contemporary journalism. Visual literacy equates to “the ability to interpret, use, appreciate, and create images and video using both conventional and 21st Century media in ways that advance thinking, decision-making, communication, and learning” (Bleed, 2005, p. 2).

Professor Anne Bamford (2006) helps further this discussion; drawing on her experience as a member of UNESCO’s Global Impact of the Arts Compendium, as
well as a member of the Advisory Committee for the International Forum on New Literacies and Education, Bamford says, “contemporary culture has become increasingly dependent on the visual, especially for its capacity to communicate instantly and universally” (p. 6). In a 2003 paper Bamford reminds us, “From the moment we turn on a TV, computer or DVD, we are in the world of imagery” (p.7). Similarly, the USA focused *enGauge* report on 21st Century skills, places visual literacy as one of the key skills for the future.

Following hard on the heels of television, the technologies of video, the Web, DVD, Palm Pilot, iPod, mobile phone etc., exploit the highly visual nature of 21st Century communication. This paper argues that journalism graduates need to become visually literate individuals in the Digital Age. Students need to be able to decode imagery, perceive meaning and make decisions based on what they see. Advocates for visual literacy argue that in the 21st Century, visual literacy is as important as writing skills — not more important, nor less important — rather, visual literacy and writing skills are of equal weight. Metros and Woolsey (2006) stress that visual literacy, much like written language, has its own syntax and vocabulary. Such arguments are grounded in the recognition of both the physical and cultural ‘place’ the screen has in disseminating information in the Digital Age. Hence, the following discussion concerning visual literacy should not be confused with a discussion about digital convergence in the newsroom, nor should it be confused with the broader notion of media literacy; though in any discussion of visual literacy, both are never far way, “like streams emptying into a river, TV, radio and print are all slowly beginning to merge” (Tanner & Duhé, 2005, ¶ 1).

Pursuing Visual Literacy

There is now a significant body of thought indicating the time has arrived for visual literacy to be taken seriously within journalism departments. Such viewpoints take into account how powerful convergent digital technology is steadily reducing the presence of media production specialists, subsequently placing the production of media in the hands of individual journalists. For example, journalism graduates from Charles Sturt University, at point of entry into newsrooms such as *Sky-News*, are now required to carryout a broad range of production tasks that were once the domain of students graduating from production based degrees. This shift is occurring at a time
when screen-based storytelling has become the dominant form of information dissemination from cradle to grave.

Research by Ron Bleed, the 2005 EDUCAUSE Excellence in Leadership Award winner, and former Vice Chancellor of Information Technologies for the Maricopa Community Colleges, talks about how pre-school children spend as much time with TV, computers, and video games as they do playing outdoors. To this end, one in four children under the age of two have a TV in their bedroom. USA research says that video game playing has now surpassed both newspaper and magazine reading among young males and is at parity with print media consumption among all Americans aged 12 to 64 (Bleed, 2005, p. 2.).

From The Perimeter To The Centre
For Hana Iverson (2005) director of the New Media Interdisciplinary Concentration (NMIC), the Digital Age translates all media into a digital realm; it breaks the boundaries that previously separated various disciplines. The NMIC hold the position that any new medium carries within it the seeds for new conceptual models and new means of interaction. Thinking along these lines, visual literacy in the Digital Age incorporates art and science; film and journalism; theory and theatre; television and graphic design. As such, the Digital Age is changing the media landscape in many and varied ways that can at first seem to be at the edge of journalism practice one moment and deep in the middle the next. For example, as mobile phones have incorporated digital cameras, visual language has entered the world of cell phones. In August 2006, Metro Screen, a Sydney based community video, television and multimedia body ran a mobile phone movie competition (DigiBytes) as a promotion for their ‘CellTales’ workshops on how to make movies with mobile phones. Increasingly, mobile phones and similar handheld devices are being used to both watch and create news, sport and general entertainment — ABC News is now available across every mobile phone carrier in Australia. To this end, Australia has around 19 million mobile phones, which is around 95% penetration (Tooth, 2006). Worldwide, the uptake of mobile phone usage is estimated to reach 3 billion by 2010 (Bleed. 2005, p. 2.). A not dissimilar technologically motivated shift can be seen in the uptake of video cameras. Only a few years ago the thought of mainstream television employing video journalists seemed as equally improbable as mobile phone News. Now, Australian
free-to-air and Pay-TV incorporate video journalism in programs such as *Living Black* (SBS), *Foreign Correspondent* (ABC) and *Sky News* (Pay-TV).

Catching Attention, Holding Interest
With its almost daily upgrades the speed of the Digital Age appears as if to be continually shaping and reshaping contemporary life, including how we acquire information, communicate, create and consume. For example, by mid 2006 the Fairfax Digital sites *theage.com.au* and *smh.com.au* began regularly tapping into the ‘YouTube’ video portal. In doing so, Fairfax Digital further added to its already substantial suite of video, audio and animation files; files that compete with text for audience attention. The video portal YouTube is but one of a growing band of video databases having emerged in recent times. One year on from its launch, YouTube is currently one of the most popular online sites (see “YouTube”, 2006).

A number of observers predicted the growth of visual content in media. For example, in 1995 Charles Brumback, the then chairman of the Newspaper Association of America, said the ratio of visual image to text is increasing, and that journalism is becoming embroiled in a culture of visual literacy, “more and more we will communicate visually and less through text” (Fitzgerald, 1995 as cited in Bamford 2003). Brumback saw that within a society that wants its information ‘now’, images will play a larger role in catching our attention and holding our interest. For example, areas that were once the domain of voice (cell phone) and text (online) are increasingly incorporating moving image ‘screen time’ into their communication suite. The nonlinear ‘clickability’ of the Digital Age has come to rapidly incorporate elements of image, colour, sequence, and motion, as such Metros and Woolsey (2006) point out that visual literacy has been added to the once privileged ‘paper space’ as a primary organizing format for expressing and exchanging knowledge.

A Screen Induced Society
The observations of Metros and Woolsey (2006) raise two issues, the first concerns the visual literacy required in order to ‘read’ moving images accurately, and the second concerns the visual literacy surrounding the meaningful ‘writing’ of moving images. Like Metros and Woolsey, I argue that all journalism students need to be instructed in how to read the moving image. While accepting that not all journalism
students will use moving images in their career, I argue that all journalists live in a screen-induced society, and hence the moving image will continue to proliferate and influence how the world is re-presented.

The notion of a screen-induced society incorporates the cinematic observations of Norman Denzin (1995) where Denzin charts the emergence of technicolour and sound in the 1930s. The realism projected by this screen-based technology significantly influenced how the audience ‘read’ the screen. Historians such as George Lipsitz (1990) argue that with the introduction of the much-loved moving image into the physical domain of the home, television further influenced society. Paddy Scannell (1995) demonstrates how the production and presentation of television developed specific techniques to seamlessly harmonise with the meter and rhythm of the all day, everyday activities of domestic life. From this standpoint, Tony Fry (1993), Juliet Schor (2003), and Sat Jhally (n.d.) argue that we are enmeshed in a screen-induced society — one that predominantly develops its understanding of the world via images on television and computer screens. Scholars researching screen-based literacy, such as Constitine (2004), adhere to the screen-induced nature of contemporary society; to this end, we can begin to appreciate that journalism graduates require ‘visual judgment’ they need to be constructive critics of visual information. In a similar vein to Bamford (2003), and Metros and Woolsey (2006) I argue that seeing is no longer believing; journalism graduates must be able to judge accuracy, validity and worth in order to expertly deconstruct and report for and about our screen-induced society.

Teaching Visual Literacy

While the example below draws on television usage, the author recognises that moving images are increasingly viewed via other means, most notably the computer screen. For example, data from The Digital Future Report (2006) a longitudinal research study on the impact of media in North American society, illustrates a decline in television viewing hours in preference for the Internet. In 2005, non-users watched an average of 6.2 hours more television per week than Internet users. The report suggests that the only principal social activity that seems to suffer from Internet use is TV viewing. In 2004 Internet users watched about 4.6 hours of television less per week than non-users, compared to 4.8 hours in 2003. Journalist Bill McKibben
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(1992) draws attention to how visual media can influence the viewer. Below, McKibben talks about his personal experience growing up with the moving image:

TV was like a third parent — a source of ideas and information and impressions. And not such a bad parent — always with time to spare, always eager to please, often funny. TV filled dull hours and it made me a cosmopolite at an early age. I have great affection for it (p.16).

When McKibben was writing his book, two thirds of Americans told researchers they got most of their information about the world from television. The Australian Network Nine affiliate WIN TV complements the observations of McKibben; the current promotion for WIN News proudly announces, “More people in the Central West get their News from WIN News than any other source.” McKibben enables us to appreciate that the screen (analogue or digital) can be understood as a place where people spend large amounts of time. In this sense, McKibben says, “what you do everyday, after all, is what forms your mind” (p. 28). Here, McKibben complements the ‘place’ based observations of philosophers such as Heidegger (1977) and Malpas (1999). Place-based philosophy argues that ‘thinking’ is informed by what we reflect upon; in terms of visual literacy, Bamford (2003) complements such observations, she says, “meaning is formed by seeing and thinking” (p.3.). When we take into account that since 1956 in Australia, increasing numbers of viewers have been and continue to be born into households where the moving image (television, DVD, PC, etc.) existed prior to birth; a particular question comes to mind. What if the consumption of vast amounts of moving-image-time is done so unreflectively? This is particularly significant in the Digital Age where journalism students face the prospect of entering a profession that increasingly draws on moving images to communicate with its audience. It is one thing to watch the screen unreflectively, it is quite another to produce screen-based material.

Teaching Visual Literacy
I teach visual literacy in tandem with teaching video editing software and camera operation, as such, I concur with Mihailidis and Hiebert (2005) in recognising that rather than vying for space in an already crowded curriculum beset with the demands of computer literacy, information literacy and general media literacy; visual literacy presents itself as compatible with and relevant to its potential competitors. My
classroom observations reveal that unreflective consumption of visual language does not translate into a natural or instinctive ability to write visual language. When the mechanism behind the production of moving images and digitally manipulated still images are unreflectively taken for granted, the syntax and vocabulary required by journalism students remains enmeshed in the glitter of the mise-en-scène (staging an action) — a friendly and familiar mise-en-scène that has not required questioning since birth (Fell 2005). We have reached a time in human evolution where increasing numbers of people live in households where the screen has existed prior to their birth; research now indicates that the unborn can build an association with a television program or programs that their mother regularly views. Professor Peter Hepper of the School of Psychology at the Queen's University of Belfast found that babies’ whose mother’s had regularly watched a television soap opera during pregnancy responded to the musical theme after they were born (Eason 1999).

The metre and rhythm of domestic audiovisual communication is absorbed at a very early age. Screen-based technologies dance and sing before us from the day we get home from the birthing room until the day we die; so in this sense, after birth, screen-based technologies such as television; with their familiar sounds and moving images are part of the all day everyday nature of unreflective domestic existence. Accordingly, in most instances journalism students commence tertiary education with unreflective, screen-based assumptions. In recognising the visual shortfalls of undergraduate students at a time when visual literacy is demanding to be taken seriously, Metros and Woolsey (2006) state:

Higher education must prepare visually literate students to look critically at images and graphic representations and ask the following questions:
“Does this image tell the truth?” “How representative is this image?”
“What is the source of this image?” “Are we responding to emotional issues or content?” (p.2).

I have a considerable sample of student material produce over a fifteen-year period: news, music clips, short dramas and documentaries. What becomes obvious when comparing the initial video production assignment from each year; is that the actual comprehension of visual literacy, at point of entry to the subject, has not significantly shifted in that time. Typically, students’ can’t transcribe the visual syntax and
vocabulary found within the 25,000 hours of television stories they have consumed since birth. Whether the evolution of video blogs such as YouTube will facilitate a broad shift in visual literacy, only time will tell – with some notable exceptions, the initial material produced specifically for video blogs tends to indicate that such a shift has not yet taken root. Indeed, many of the videos screened on video blogs remind me of my students initial video productions or indeed the initial unedited films screen by Lumière in 1895: Workers leaving the factory, a wall being demolished, a train arriving at a station, parents feeding a baby. Such clips have a domestic ‘Funniest Videos’ feel about them.

Journalism graduates require skills that move beyond the ‘spectacle’ and ‘prank’ content that dominates video blogs. Here, I am talking about constructing a story so that it can be ‘intentionally-read’ (Scannell, 1990) as a piece of journalism. Hence, single-shot cinéma vérité video of one-off events should not be confused with the considerable literacy required to capture and edit a succinct story. In saying that, the paper acknowledges media reception research (Fiske, 1992; Hall, 1980) that demonstrates how viewers can have multiple interpretations of the same content — a position that compliments the theory of place — viewers can accept the message as intended by the producers, they can also write their own meanings, or they can mix elements from both the program and from their own conceptualisations.

To Copy Is Not To Create
Over the past fifteen years I have observed the shift from teaching analogue video editing to nonlinear computer editing. When I began teaching analogue editing the technology and the process of editing was a technological mystery to my students. This was also the case when my school became the first communication school in Australia to introduce computer based nonlinear editing. In recent times, particular since around 2003, increasing numbers of students commence my production subject with reasonable skills in basic computer operation; as such, many are capable of uploading data onto sites such as YouTube, as well as downloading MP3 music and videos. Increasingly, students begin my subject equipped with personal laptops and editing software. To my surprise, as my student cohort came to represent the burgeoning Digital Age, I did not witness a shift in student visual literacy. Like many, I had wrongly assumed that access to digital technology would somehow
transmogrify my students into visually literate people. My students’ digital
clickability is often a type of digital stamp collecting. Their ability to copy data,
navigate and converge does not crossover into the ability to tell a story. To digitally
copy, clone and compile incorporates a different set of processes and should not be
confused with this discussion.

Thinking along similar lines to this paper, research coming out of the USA by Metros
and Woolsey (2006) argues that being able to view an image does not equal the ability
to create visual literacy. My observations indicate that students both immersed in and
enthused about visual imagery: digital photos, personal DVD libraries, personal video
camera’s etc., — often lack the skills, precision, and depth, as well as the education,
that allows them to be masters of the medium. As mentioned, they can copy, but not
necessarily create a meaningful story. In this vein, Metros and Woolsey report on
their recent USA undergraduate teaching:

As the class progressed, it became obvious that although these students
were indeed visual learners and travelled seamlessly in a world rich with
sight (and sound), they lacked the ability to express themselves visually
(p.1).

Such observation sits neatly with my own, for oftentimes students don’t understand
what they are actually viewing, or what is actually being said (visually). David
Considine (2004) argues students should to be taught to recognize how visual and
sound techniques are produced and hence be able to examine the effects such
constructions have on their personal perception of reality. Drawing on early work of
Considine, Mihailidis & Hiebert (2005) mount an argument that while more young
people than any generation in history access visual media, “they do not necessarily
possess the ethics, the intellectual skills, or the predisposition to critically analyze and
evaluate their relationship with these technologies or the information they encounter”
(Considine 2002. p.2). My classroom observations concur with Considine’s research, I
have also noticed that good hand/eye coordination and the ability to multitask are not
substitutes for critical thinking — Metros and Woolsey (2006) put forward similar
arguments. I argue that the practical teaching of visual literacy in a digitally enhanced,
screen-induced society goes some considerable way towards facilitating a student’s
ability to critically analyze and evaluate their relationship with screen-based technology and the information they encounter.

Why Visual Literacy Matters
Should we be concerned that after thirteen years of primary and secondary education, and some 25,000 hours of television watching, plus an average 10,000 hours of video game playing, and 10,000 hours of cell phone usage (Bleed. 2005), only a handful of university journalism students (eighteen months prior to a communication career) are beginning to discover the smoke and mirrors of visual storytelling? — For example, through a number of practical production exercises, students are beginning to discover how mise-en-scène and image sequence affects audience perception. I suggest that teaching journalism students visual literacy is more important now than in years gone by. Increasingly, graduates find themselves in workplaces where multi-tasking is becoming the norm at a time when media production staff are in decline. For example, in television, when going out on a story (with a production crew) oftentimes an experienced camera operator will have most if not all the covering footage shot; without requiring any visual guidance from the reporter; indeed the opposite is often the case. A sort of apprenticeship in visual literacy has traditionally taken place between the camera operator, the editor and the ‘new’ reporter. Now, some journalists have to video and edit footage, though the main emphasis in Australia is towards editing footage. Just a few years ago it would have seemed farfetched to suggest that free-to-air newsrooms would require journalists to edit their own stories; now it is becoming the norm.

As we have seen, the process of visual storytelling requires more than technical competency; graduates require visual literacy, they need to know the syntax and vocabulary of the image in order to communicate with their audience, as a visual storyteller. As we saw above, Brumback argued in 1995, “the ratio of visual image to text is increasing, and that journalism is becoming embroiled in a culture of visual literacy.” Brumback’s predictions have proven to be the case.

High Tech, High Touch, High Concept
Drawing on the work of Bleed (2005) an argument can be mounted that the Digital Age affects journalism in a particular right brain modality, due to the high tech nature
of convergence technology. Increasingly, journalists have a high touch relationship with the means of production; as such, they require high concept skills in terms of visual literacy. Such hands-on interaction with images draws heavily on right brain activity. In this Digital Age journalist graduates need high-concept visual literacy abilities to craft a satisfying narrative, one that sits comfortably within the norms of how screen-based stories are consumed by the general public. Drawing on Bleed, I argue that our screen-induced society requires journalists to display artistic expression in their visual storytelling. The argument being, that while technology builds on the left-brain abilities of logic, analysis, literalness, and sequentially; the right-brain abilities of creativity, empathy, pattern recognition, and the making of meaning are; in the world of journalism, increasingly falling on the shoulders of the sole journalist. Put simply, in a screen-induced society, visual storytellers such as journalists require right brain activity; for they are dealing in a creative medium:

Although previous success in school and work was heavily dependent on left-brain abilities of logic and analytical talent, right brain abilities are now the abilities that matter most — artistry, empathy, and seeing the big picture (Bleed. 2005. p 5).

Conclusion
While much has been written about convergence and the need for journalists to develop computer literacy skills, what is less understood is that accompanying those skills is the need for visual literacy; how to structure a meaningful visual story that can be read as intended. As we have seen, the general public are increasingly assimilating information via images — in particular the moving image. Increasingly, the audience can access News via web sites such as Fairfax Digital and YouTube without having to read text, or as an adjunct to text. To that end, the general public have certain expectations in how a moving picture-story is told. As we have seen, there is a substantial difference in a person’s ability to ‘read’ the screen as ‘meaningfully intended’ and that of producing a story that will be read as ‘intended’. In the past, media production staff assisted journalists in packaging raw material into an ‘intended’ message that was read by the audience as ‘intended’. Increasingly, across the digital landscape, the task of telling the whole story is being placed in the hands of the sole journalist. As such, it has been argued that there is a need to teach visual literacy to all journalism students due to a shift in workplace skill requirements;
as Bleed (2005. p10.) argues, “being visually literate will be a prerequisite in the future because visual media are integral to how we work, entertain, communicate, and educate.”

References


