News literacy in the digital age: challenges and opportunities

Ognyan Seizov, visiting fellow, Comparative Media Studies and Writing, MIT

Introduction

The advent of Web 2.0 was arguably the greatest game-changer for the practices, conventions, and scope of mass communication. In its aftermath, journalistic education and journalistic practice need a thorough revision in order to continue serving their socially assigned purposes.

In the wake of this sorely needed update, professional journalism finds itself facing a multitude of technical, conventional, conceptual, and societal challenges. Some of them are truly recent while others find their roots in previous stages of mass media development, but the fact remains: today's news personnel are in a digital perfect storm, and for the first time in the history of mass media, professionals get to learn from amateurs.

The digital turn in mediated human communication has opened up the traditionally walled off, one-way, regulated, curated, and professionalized news-reporting process (cf. Thorne 2008). Painstakingly educated correspondents supported by trained crews now make way for citizen journalists whose contributions are increasingly considered on par with those of seasoned news pros. During the Boston Marathon bombings of April 2013 or the Paris terrorist attacks of November 2015, a large portion of the public did not turn to their TVs or to the major news network websites. Instead, they clung to their smartphones, tweeting, retweeting, blogging, posting pictures from the scenes, and commenting on others' visual and textual reporting. Their information entries travelled across the globe, and professional news channels such as CNN quickly adopted them as part of the iReport wave. These are examples of extraordinary events, but such explosions of user-generated media content which is readily adopted by the mainstream communication channels merely bring a peak to a phenomenon that is now omnipresent in all network societies (cf. Castells 2005). As the extent and impact of "amateur" media production grow, our working understanding of news literacy is in dire need of updating. We become news-literate through our exposure to and consumption of mediated news reporting. The news literacy of the digital age is overwhelmingly locked in understanding citizen journalism's user-generated norms and practices (cf. Bruns 2007)—and for the first time in its history, the journalistic guild has to look beyond its education and professionalization to stay relevant.

The article explores the interplay between the norms and practices of professional and citizen journalism in the digital arena. In the absence of many traditional constraints regarding the canvas, production, and consumption aspects of multimodal expression (cf. Bateman 2008), both the content and presentation of news items online pose new requirements to today's professional media producers. They also keep the definition of news literacy in constant flux. Its parent concept of media literacy is similarly pushed in new, sometimes opposing directions by rapid technological growth. The opportunities for two-way dialogue, the numerous design and composition choices (cf. Seizov 2014), the feeding frenzy, and the drastically shortened news production cycle create new criteria for news composition and newsworthiness. The article traces the effects the Internet age has had on the concept of media literacy and proposes a functional definition of news literacy, which poses conceptual and practical questions for contemporary journalistic education. It then singles out blogging as a fruitful avenue for developing the professional, social, and personal skills which can help modern-day journalists keep up with the wave of user-generated communications (cf. Bruns 2007, 2008; Tofler 1980) and deliver quality content which is visible, accessible, and shareable.

Rethinking media literacy in the digital age

Before approaching news literacy as a term, we need to define its parent concept of "media literacy" and contextualize it in the present time. It, too, has seen major revisions thanks to the technological and procedural developments in media practice over the last decades. As Marshall McLuhan famously postulated, "the advent of a new medium often reveals the lineaments and assumptions, as it were, of an old medium" (McLuhan 1960, 567). The rise to power of the World Wide Web, which went from a specialized scientific intranet to a global information "superhighway" (after Benjamin and Wigand 1995), has indeed exposed a number of fundamental features which lie at the core of what we now call "traditional" news media, be they print or broadcast. The most prominent features of these media are: (a) one-way communicative disposition (cf. McQuail 2005); (b) well developed professionalization which rests on society-bound ethical codes (cf. Hallin and Mancini 2004); and (c) medium-specific canvas constraints (cf. Bateman 2008)—or technical/production limitations—which actively shape the amount and kind of information that each medium can relay.

The ways a medium maps onto the three dimensions above determine the literacy levels it requires from its audience as well. While the concept itself has sparked long-standing debates (cf. Luke 1989), there is general agreement around Aufderheide's (1993) and Christ and Potter's (1998) definitions of media literacy, summarized as "the ability to access, analyse, evaluate, and create messages in a variety of forms" by Livingstone (2004, 5). The nature of traditional media focuses on the access, while typically language-centred education (cf. Kress 2010) makes sure audiences have the basic skills for analysing and evaluating the mediated information's verbal component, be it spoken or written word. The presence of other modalities and their mutual, semantically significant interaction are not usually of primary production importance even though they play a crucial role in reception.

Analysis and evaluation rest on the recipient's perception. As mass media are becoming increasingly dependent on advertising revenue, which correlates directly with the size and composition of their audiences, the acute awareness of what the audience can and what they want to perceive during their media consumption becomes central to the journalistic process. This holds especially true for news media, arguably the most dynamic field in the mass communication spectrum. Therefore, advanced understanding of both the production and reception processes behind contemporary news consumption needs to become an integral part of journalism education.

In the context of the Internet's global penetration rising, we can use the three key media dimensions above to circumscribe the clash of "old vs. new" media and to illustrate the ways in which the Web in all its incarnations has surpassed its predecessors as a dominant mass medium. The dimensions also help us demonstrate how the concept of media literacy is changing rapidly, encompassing an ever-broadening set of skills (cf. Ette and Stoker 2014). This competence shift has important implications for journalism education and hints at the new abilities media professionals as well as media audiences need to acquire in order to stay current. To emphasize the idiosyncrasies behind the former audience's quickly growing tech savvy, the rest of the paper will focus on professional journalism's Web 2.0 skill gap and how it can be remedied. Journalists' education is in particular need of updating, so they can continue serving their socially endowed roles (cf. Peters and Witschge 2015), which roughly encompass the necessities to inform, educate, and persuade. For the first time in the profession's history, however, the learning curve is so steep (cf. Barrett 2014; Wolfe 2014), and there is another group of media- and tech-competent actors who are already way ahead in the game, as will be discussed in the following section.

While the challenge ahead of journalism education is certainly formidable, this is not the first time the guild has to face rapid technological expansion and increasing competence demands. Advances in printing have long broken up the rigid newspaper and magazine layouts, and broadcast media have made gratuitous use of new technologies, running split-screen or embedded video segments accompanied by infographics, newsflash strands, and other information-carrying elements. These developments demonstrate how both traditional and new media become increasingly hybrid (cf. Kraidy 2005), complex (cf. Bateman 2008), and multimodal (cf. Seizov 2014). As a result, the set of features pertinent to contemporary news content grows wider and demands increasing levels of literacy and competence from all parties involved in the exchange of information. This growing complexity poses a challenge to effective communication: both producers and consumers need to acquire new skills and rely on a shared set of relevant communicative conventions. In other words, they need to be mutually media-literate.

The concept of media literacy is, therefore, the starting point of our debate, and it is a contested construct in its own right (cf. Livingstone 2004). Having moved beyond the simplistic definition of being able to read and write, "literacy" raises important, discursive questions about possessing the necessary authority to access, interpret, and (re)produce texts (Livingstone 2004; Luke 1989). These considerations become particularly amplified in the digital age where access depends equally on having the relevant technology (i.e. a networked device) and the taught and/or acquired experience to "read" online content; where interpretation is supported by the sum-total of the media users' experiences with both producing and consuming online mediated content; and where (re)production relies on easily acquired skills in a variety of widely available and affordable media production software applications (e.g., image and video editors, web content management systems, etc.). The key aspect here is the low threshold in front of today's media prosumers. Their media literacy is, seemingly, taken as a given: if they may call themselves prosumers, then they must possess it. However, assuming the same of professional journalists and sending them off into the Internet realms without targeted preparation and experience carries far-reaching risks for further eroding the profession's societal impact and perceived authority. Hence, a concerted effort at updating journalists' own news literacy and online skill set is needed in order to prepare them for the challenges of the day.

Journalism in the digital age: functions, norms, produsage

The major hurdle in front of journalism in the digital age is the unexpected competition the profession gets from amateur producers—or prosumers as we will call them from now onwards (cf. Tofler 1980). The widespread practice of creating, curating, and disseminating content that reaches increasingly large audiences continually inspires new individuals to jump on the bandwagon of prosumption individually—or collaboratively, in what Bruns (2008a) terms produsage. This practice tends to erode the authority full-time journalists used to command thanks to their professional and institutional backing (cf. Pew Research Center 2012). What used to be an environment of scarcity defined by gatekeeping and quality control is now a wide-open playing field with strong and varied competition.

Therefore, traditional journalism, best exemplified by its "offline" representatives like print newspapers or TV broadcasts, faces considerable challenges which it cannot address by merely transferring its established practices to the networked context. It is also important to note that it has brought a large portion of this challenge onto itself by: (a) cultivating a gnawing need for breaking news and constant updates which prosumption can now satisfy more quickly and efficiently; (b) building up barriers to information access (e.g., limited number of freely available articles in the online edition, "premium" content, etc.) which prosumption inherently lacks and, indeed, strives to bypass; and (c) sticking to a relatively slow news production process which involves several stages of content generation, editing, post-production and final approval before dissemination. Many would say the latter is an essential part of professional routines and, indeed, what sets journalists apart from "iReporters." However, the blossoming of digital citizen journalism (cf. Allan 2007; Allan and Thorsen 2009; Bruns 2007) demonstrates that audiences are not overly concerned with the quality assurance behind news stories—especially not when they are breaking or scandalous. This trend has important implications for the way we define news literacy in the digital age.

The chief concern when revising our view of news literacy in the digital age, hence, should be what the public accepts as news and how it recognizes news value in the ubiquity of texts available on the World Wide Web. Given the difficulties even established media institutions are facing, we would do well to adopt a functional approach to creating a new definition as opposed to the normative view which has been dominant in the field. To start on this task, we first need to explore the societal functions of journalism and how they are evolving in the digital age (cf. Peters and Witschge 2015). As we take on this task, it is crucial to consider the defining characteristics of new news media without falling into a "reductionist discourse of novelty" (Carpentier 2009, 408) which might threaten to cloud our (re-)evaluation. While exploring said societal functions, we will also refer back to the way they map onto the Web 2.0 infrastructure and define journalistic challenges and opportunities therein.

Information and commentary

This is easily the most basic societal function of mediated news. In the words of Zaller (2003, 110), "news should provide citizens with the basic information necessary to form and update opinions on all the major issues of the day." Despite its prescriptive phrasing, this definition helps news' most important function flesh out, namely the imparting of high-quality knowledge which the audience finds relevant in the political, social, or any other essential context. Journalism is often criticized for not doing enough in this department (cf. Franklin 1997), and Web 2.0 is seen as the panacea: where professionals fail, the crowd will deliver.

It follows, therefore, that digital news literacy involves the ability to seek out and filter through relevant information—a combination of access and evaluation as defined earlier (cf. Livingstone 2004). We will do well not to dismiss access as merely the provision of the pertinent hardware and connectivity, however. With equal importance, it denotes the ability—rather than the mere opportunity—to get to a desired news source, and it goes hand in hand with evaluation, or the ability to judge the newsworthiness of an online publication. Both of these are based on users' experience collecting information from traditional news media and their Internet competences. In other words, digital news literacy depends on the close interaction between discreet sets of on- and offline skills.

Because traditional media have taken many and often winding routes to establishing their digital presences (cf. Tameling and Broersma 2013), a good portion of the Internet public has turned to alternative sources of news which rely on an environment of "discursive and deliberative" citizen journalism (Bruns 2007, 2) appropriate to the Web 2.0 sensibility. Apart from creating new forms of competition, prosumer-generated news actively modifies the very definition of "news" in the public mind. Previously key properties such as reliability, trusted source, or professional production become secondary to speed, realism, and crowdsourced support expressed via social media activity. Prosumers, therefore, recognize news not by the long-established, institutionally bound tokens anymore; the social media noise (liking, pinning, commenting, reposting, etc.), the short production cycle, and the attention-grabbing presentation become markers of good information and/or commentary and, therefore, of newsworthiness in the digital age.

Watchdog

Another important function of traditional journalism is keeping powerful political and commercial actors in check for the benefit of society at large (cf. Peters and Witschge 2015). Fulfilling this function usually involves whistleblowing in cases where private interests endanger the public's wellbeing. It often takes the shape of meticulously researched pieces of investigative journalism, which demand: extensive preparation and construction of the case, not unlike detective work; specialized access to sources which oftentimes are not publicly available and require anonymity and protection; and institutional support for the investigative journalists themselves which guarantees their freedom to pursue such high-risk stories. The last point has been particularly contentious in the context of traditional media where many conscientious journalists are stifled top-down by political parallelism (cf. Hallin and Mancini 2004) and general clientelism (cf. McChesney 1999). Having whistleblowing instincts and all the connections in the world cannot compensate for the lack of motivation and institutional backing necessary to complete and publicize an investigation.

The Internet has brought heaven on earth for whistleblowers of varying proportions. The promise of anonymity and the easily achievable mass audience reach, given the right set of skills, create the ideal conditions for relegating whistleblowing to the crowd. Hence, the "liberalization" of the watchdog function circumscribes an area where traditional journalism has fallen considerably behind, in terms of both reach and output. The ease with which content can be generated and published online (thanks to advanced smartphones, high levels of computer literacy, and ubiquitous connectivity opportunities) has brought about an astounding number of citizen reports across a wide spectrum: from indolent illegal parking on the streets of Bulgaria to the Edward Snowden revelations about the NSA. The growing number of significant cases of citizen investigative journalism online has further diminished the public's perception of traditional media as likely whistleblowers. This shift has also consistently eroded the perceived necessity for institutional support behind investigative journalism in the public's mind. In the digital age, anyone can be a watchdog. In acts of collaborative produsage and filtering (Bruns 2007), media prosumers can now collectively seek out meaningful information in order to classify, evaluate, and disseminate it further down the prosumption chain. The collaborative aspect of the task mimics the institutional backing professional journalists may rely on and, thus, provides a number of support channels for prosumer whistleblowers.

The implications of the citizen watchdog phenomenon for news literacy are far-reaching. On the one hand, technology allows common people to shine a light on wrongdoings of various magnitudes and, thus, erodes the perceived need for investigative journalism in the first place. Even worse so, it lowers public trust in the professional investigative pieces that do get publicized, so any institutionally backed example of watchdog journalism receives much closer scrutiny and is always taken with a grain of salt. The implications for news literacy in this journalistic function are that content and author become much more important for the story's impact than the publication context. This development puts a lot of tension on professional journalists and pushes them to venture beyond their institutional "homes" in order to get their whistleblower content to the masses. On the other hand, this institutional unshackling also points journalists in an exciting new direction which will be discussed later in this article.

Mediator in political communication

The remaining two functions of journalism, as defined by Peters and Witschge (2015), pertain to representing the public in matters of politics and mediating for politicians. We can subsume this under the common moniker of "public mediation" since the task entails the two-way communication between political actors and society at large. Traditional journalism has lost a lot of ground in this avenue as well, since both politicians and the public have acquired powerful tools for self-representation on a mass scale, mostly thanks to the Internet's penetration in our daily lives. The advent of the World Wide Web was seen as an opportunity for leveling the playing field for political actors large and small and for opening up two-way dialog with the constituency after more than a century of passive message reception.

As political persuasion and political discussion moved online in the 1990s, scholarship was divided between: (a) the hope for free, two-way communication between politicians and the public (cf. Coleman 2001; Endres and Warnick 2004); and (b) the fear that path dependency would prevail and the status quo of the "professional," one-way campaign would merely transfer into the new medium (cf. Foot and Schneider 2002; Gibson and Römmele 2001; Xenos and Foot 2005). Research is still detailing the benefits, costs, and pitfalls of online political communication. What we definitely know is that it is consistently multimodal and inclusive, allowing for a multitude of voices and just as many expression patterns (cf. Seizov 2014) to circulate with less constraints than ever before.

While the dream of free dialogue might not have materialized yet, the loosening of technological constraints and the virtual elimination of traditional media's gatekeeping role are established realities, and prosumers, working for themselves or for political actors at the grassroots level, are happy to collaborate in sifting through relevant political information and making it part of their own political communications on the Web (cf. Bruns 2007). Traditional journalism still has much to learn from both politicians' and the public's drive to represent themselves online. The wide gamut of expression means and layouts available to both groups allows them to find unique new ways of multimodal message relay and to test their effectiveness in real-life contexts. This process of trial and error, of forging new communicative designs, is especially pronounced on the side of the public since politicians still rely on PR professionals with know-how on par with seasoned journalists—or even more advanced. The public, on the other hand, often works independently which means: (a) less support in terms of finance, infrastructure, and equipment; (b) less taught knowledge and skill in favour of learning-by-doing; and, conversely, (c) more creative freedom and opportunity for bottom-up innovation.

It is the last point that holds the biggest potential for journalism's reinvention in the digital age. Professionals stand to benefit a lot if they take their cue from prosumers regarding the best contemporary formats, in which news ought to be presented. They also have the expert training and the ethos to remedy the inherent vices of prosumption by publishing news speedily, with little editorial interference but still adhering to their professional code of conduct and the principles which make good journalism (e.g., focus on facts, clearly marked editorial pieces, reliable sourcing, and so on). A pairing of prosumption's strengths with traditional journalistic ethics and best practices is possible, and it plays right into the principles of news literacy in the digital age. Journalism education, therefore, ought to prepare professionals of all ages to think like journalists and act like prosumers. It is a long road which goes through the core of the prosumption phenomenon and requires news reporters to approach it academically and get well versed in its primary modus operandi: Internet-powered multimodality. The following sections offer an elaboration and illustrations thereof.

Prosumption as a guide

The pairing of information access and information generation, thanks to Web 2.0, ushered in the age of the media "prosumer" (cf. Bianco 2009; Ritzer and Jurgenson 2010) or "produser" (Bianco 2007). The former term, coined by futurologist Alvin Toffler (1980), merges "producer" and "consumer", while the latter is a portmanteau of "producer" and "user". The dual role both concepts describe is a central tenet of communicative processes in the context of Web 2.0, an environment built upon an "architecture of participation" (O'Reilly 2007, 17) and collaboration (Bruns 2008a). Media conglomerates' monopoly over the creation and distribution of content has been broken, and nowadays prosumers play a central role in mass communication processes (Comor 2011), creating new communicative rules, trends, and affordances as they walk hand in hand with rapid technological development. Along the way, they also create new media literacies and reshape the shared understanding of what constitutes news and how it should be reported. As individuals become increasingly interconnected—as they join the "network society" (e.g., Castells 2000, 2005)—sharing texts, visuals, and the meanings they carry becomes second nature. There is a new kind of functional news literacy being born right before our eyes, as the public reacts to events and creates its own representations and interpretations of them.

For all the freedom and fluidity that it provides, prosumption is also a double-edged sword. Comor (2011, 309) notes that "both mainstream and progressive analysts conceptualize prosumption to be a liberating, empowering and, for some, a prospectively revolutionary institution." As we have discussed above as well, the revolutionary character of prosumption lies in its potential to lift the traditional barriers around mass mediated communication and provide access to tools and information which were previously unavailable to the wider public. However, the rumbles prosumption sends all the way down to the fundaments of most Western media systems do not always bring good vibes.

One particular concern identified by Ritzer and Jurgenson (2010, 13) is the trend towards amateur, unpaid, and abundant content generation within a system where scarcity and professional monopoly used to be the norm. Prosumption offers an adequate and accessible response to the mass audience's "feeding frenzy" (cf. Sabato 1991)—the constant hunger for more news even if none exists—and all that free of charge, a feat professional journalists cannot match (cf. Ritzer 2007). Furthermore, the trade-off between speed and accuracy puts a strain on journalists' professional ethos. It also threatens to create a jaded kind of newsworthiness and news literacy which may bypass rigorous fact-checks in favour of round-the-clock updates.

This "fast food" approach to news stands to benefit greatly from an infusion with journalistic values, where speed is just as vital but does not come at the expense of truthfulness. Media professionals are in an excellent position to harness or harvest "the hive" (cf. Bruns 2008b)—the collective prosumer mind and its media prowess—by adopting prosumption practices and regaining a central role in the mass communication process thanks to their already well-established community structures. To make the most of this opportunity, however, journalists need in-depth training in media production in order to be able to craft content and publicize it themselves, as part of the prosumer crowd, reducing production cycles and building up a new kind of expertise and rapport with their prosumer audiences. This education begins with a crash course in multimodality and online communication.

Multimodality as an essential component of digital news literacy

Multimodality is one of the defining qualities of our surrounding world and the way we perceive and make sense of it. It refers to the interactions of different communication modes, like images, text, sound, movement, and so on. It is a rich and varied field for academic research, as reviewed by, e.g., Bateman (2008) and Kress (2010). Multimodal document research works primarily with media artefacts in which "a variety of visually-based modes are deployed simultaneously in order to fulfill an orchestrated collection of interwoven communicative goals" (Bateman 2008, 1). The "interaction and combination of multiple modes within single artefacts" (ibid.) are of major interest to researchers and media practitioners alike because of their potential for "multiplication of meaning" (Lemke 1998). Understanding the inner workings of multimodal communication, therefore, is at the core of media literacy today. As the dominant communicative practice revolves around such orchestrations of text, audio, and still as well as moving images, producers, consumers, and prosumers face a steep learning curve when it comes to learning how to make meaning.

Multimodality has been around for a long time, but it has blossomed on the fertile grounds of Web 2.0 where production constraints are loosened and the hunger for information is greater than ever. This allows for the integration of two or more communication modes, which then form a richer and more compelling message (cf. Thibault 2001) that gets collectively and collaboratively disseminated far and wide (cf. Bruns 2007). Contemporary media documents, especially prosumer-generated ones, are "born" multimodal thanks to quantum leaps in Web publishing and the necessity to pack quality information in attractive layouts to increase visibility. Therefore, prosumer media content displays much higher rates of modal density (Norris 2004) or co-deployment (Baldry and Thibault 2006). In this field of growing complexity, journalists need to strike a balance between attention-grabbing and information-centred designs. Here is where targeted, multimodal news literacy education can help.

"Multimodal literacy" comes at the heels of the "visual turn" in communication (Bateman 2008, 2) and relies on prosumers' ability to encode (produce) and decode (interpret) image-text relations. In other words, it garnishes our functional definition of "media literacy" with a concrete modal layer. The paths to acquiring that literacy are multiple. The "prosumer way" is to process large volumes of multimodal online content, approach it critically, and start producing in turn, emulating and improving upon the production routines which have been deduced in the perception process. By virtue of their profession, journalists are exposed to volumes of multimodal documents on a daily basis, and many of them also possess technical know-how acquired during their interactions with typesetters, cameramen, and other media production staff. Hence, they are in a favourable position to quickly master the dominant multimodal expression patterns of the day and to apply them in order to create a "Prosumption Premium" trend: one where speed and attention grabbing meet professional ethos and quality content.

Getting an empirical perspective on multimodal content design

The first step towards augmenting journalists' existing content creation expertise with empirical insights from the growing body of multimodal media research is familiarizing them with some prominent and practicable approaches to analysing and annotating multimodal content. The following section reviews two such models and their possible contributions to expanding the theoretical as well as practical component of multimodal production in journalistic education.

One prominent approach to multimodal document analysis revolves around the concept of genre, best operationalized as follows:

> A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. […] In addition to purpose, exemplars of a genre exhibit various patterns of similarity in terms of structure, style, content and intended audience. (Swales 1990, 58)

This definition of genre ties in with our functional view of news literacy: the qualifying characteristics of the news genre, such as style, content, or intended audience in the quote above, naturally lead audience members in certain interpretative directions. The main challenge in front of multimodal research right now is to create the empirically motivated bedrock of specific genre definition. To address this task, Bateman et al. (2002) developed an analytic-synthetic model: GeM ("Genre and Multimodality") which provides exhaustive descriptions of base units, layout, organizational, and rhetorical mechanisms in multimodal documents, in order to allow for an empirically motivated determination of genres. The scheme is further elaborated by Bateman (2008) and calls for concerted further research in order to arrive at verifiable genre hierarchies. The usefulness of the GeM annotation framework for journalism education might not be immediately apparent, but its principle of exhaustive documentation of meaning-carrying units and establishing semantic relationships between them is at the core of the digital incarnation of news literacy as we know it. GeM's rigid protocols will make journalists mindful of the implications of their word, illustration, and layout choices when composing news segments.

The other multimodal annotation scheme with direct implications for digital news literacy is ICON ("Imagery and Communication in Online Narratives"), presented in Seizov (2014). Focusing on the analysis of political communication online, the annotation model characterizes the spatial and semantic relationships between images and text, the two most common communication modes which digital prosumers employ. Based on an initial analysis of a sample of political webpages, including an international sample of news websites, the author arrives at three main structural configurations ("lead visual," "multiple visual," and "text-flow") which map onto three distinct communicative functions ("inform," "persuade," and "reason," respectively) (for further detail, see Seizov 2014, 130–134).

After getting sensitized to the amount and kind of meaning-carrying base units and their meaningful combinations thanks to the GeM framework, digital journalists can enhance their understanding of online rhetoric with ICON, a more immediate, effect-oriented guide. The three basic designs are simple enough to duplicate and manipulate according to the article's needs, and their functions cover the central purposes of news reports and/or editorials, which are the traditional journalistic genres the public has come to expect. Working within those loose constraints, journalists can explore the possibilities each of the three ideal types offers and create relevant, information-rich content which meets the public's modal expectations and plays to its prosumer sensibilities.

Blogging: applying multimodal news literacy in real time

"Blogging has the potential to be a transformational technology for teaching and learning," Williams and Jacobs (2004, 232) observe, and this form of Web publishing certainly does not fall short of its promise in the realm of journalism education. The insights from multimodal document analysis need to be integrated into the curriculum in a practicable manner which allows current and future professionals to apply them in a real-time, fast-paced, editor-free environment—the way the World Wide Web usually works. The most natural move would then be to start a blog and approach it as a multimodal message lab where different strategies and designs can be tested in the field. While a number of professional journalists have naturally gravitated towards blogging as a powerful (albeit secondary to their respective jobs) channel for communicating news and especially commentary to the public, it has not yet become a focal point of journalistic education. Where it has been included, blogging is usually not studied holistically: writing the message tends to be in focus, while the composition, design, illustrations, and layout are covered in passing or considered self-explanatory. As discussed above, however, the medium, the genre, and the presentation of the message possess powerful semantic effects and can, in fact, obscure the verbal text's intended meaning completely.

The call for practice-based multimodal literacy comes at a time when journalists are expected to be "multi-skilled […] self-starters" (Barret 2014, 56) with growing technical know-how garnered via theoretical education and multiple work placements throughout their university studies. Knight and Yorke (2004) have demonstrated how important self-beliefs and perception of competence are for university graduates' career development later in life, and blogging presents an excellent opportunity to create a set of skills "in action" which then boost professional expertise as well as self-confidence for young journalists in an environment of high stress. Active blogging is also an excellent opportunity to spread good professional practices within the guild, as Willis (2010, 15) argues that "journalists learn what is acceptable and unacceptable behaviour from other journalists"—a self-perpetuating, constantly updated cycle of ethical and practical norm internalization. Such a fluid set of rules matches the unconstrained environment of the World Wide Web closely. It presents great learning opportunities for young media professionals to practice new forms of multimodal news literacy and get real-time feedback from colleagues, prosumers, and consumers alike.

Blogging also provides ample opportunities for critical reflection, which Fowler-Watt (2014) identifies as an important component of journalism education, too. The environment of instant feedback and open dialogue, which should be made compulsory in the blogging task, forces journalists to not only acquire the technical skills and the information necessary to create a blog post, but also to consider the implications of their communicative choices and the reactions they elicit in their audiences. Journalists rarely visit the comment sections underneath their online publications; when they blog, however, the incentive to participate in the discussion is much higher. This high level of accountability provides a "cure" to the problem of vaguely defined, tacit professional knowledge which, instead of "spontaneous and automatic" (Schon 1995, 60), becomes situational and perpetually de-/reconstructed. In this prime example of experiential learning—i.e. "through first-hand experience" (Ette and Stoker 2014, 92)—journalists expand their capabilities for "examining and strengthening the critical linkages among education, work and personal development" (Kolb 1984, 4). The multimodal blogging approach promises to build up a solid new set of skills for journalists and, thus, to improve their professional expertise while also boosting their confidence and sense of self-worth along the way.

Conclusions

The multivariate effects of Web 2.0 on media practice, media literacy, and news values have put visible dents in the traditional understanding of journalistic best practices and news production routines. As professional reporters face increasing competition from amateur (if only by their lack of journalism education) media producers, their monopoly on the dissemination of credible information—and, hence, their authority—is crumbling. The ability to recognize, evaluate, and disseminate news is no longer a given for any media actor, professional or amateur. In the constantly changing environment of digital media and the 24-hour news cycle, it is best to adopt a functional definition of news literacy and tie it to the shared media production practices of the wider public, or the prosumer crowd as it has been presented above. When assuming the passive role of an audience, prosumers will actively look for the information designs they recognize and utilize themselves. This should also be the starting point of a new approach to training journalists.

Journalism education, therefore, needs to prepare journalists for the prosumer era, and the easiest path towards that goal is the integration of multimodal literacy and blogging into the curriculum. Furnishing students with the necessary Web 2.0 skills like basic HTML, content management systems, and so on is only the beginning of the process. The Web is inherently multimodal and arguably the least constrained medium in terms of production options. This freedom is a blessing for obvious reasons, but also a curse, especially when it comes to mastering a multitude of new expression means and formats, on which professional journalists tend to rely, as they have done historically (e.g., straight-on news reports, opinion/editorials, or advertorials). This is where targeted education in online multimodal expression can help. The integration of multimodality research into journalism training serves a double purpose: it introduces students to the many possible orchestrations of textual, visual, audio, and/or video multimodal designs; and it demonstrates how the shared social practices combine those communication modes into evolving genres.

Multimodality's grounding in social practice allows it to stay abreast with the latest developments in online communication, and its reliance on genre as an anchor of meaning creation and dissemination trains journalists to work within positive, productive constraints rather than face the wide-open canvas of the Internet in its expressive totality. Instead of being stupefied by the sheer number of choices, journalists will learn to ground their message designs in social and generic contexts which are directly tied to their audience's news literacy levels. To go one step further, being mindful of widely used multimodal expression constructs lets journalists bend them and reinvent them, actively shaping the shared news values and literacies in their audience circles. Multimodal online readiness, thus, closes the digital news literacy cycle and promises to give the power back to the professionals who can then apply the necessary ethics and quality controls to the new, fast-paced environment of instant information sharing. It also stands to make journalism much more effective, impactful, and sustainable in the digital age and to ingrain the multimodal principles of meaning-as-use and socially defined communicative convention into journalistic practice, so that it can stay on top of further innovations and continue to serve its informative and societal goals. Ignoring these new developments might not pose any imminent danger to the profession; however, the low opportunity costs and the immense potential of journalism's Web 2.0 skill update make this educational shift all but imminent.

References:

Allan, Stuart. 2007. "Citizen Journalism and the Rise of 'Mass Self-Communication': Reporting the London Bombings." Global Media Journal 1 (1): 1–20.

Allan, Stuart, and Einar Thorsen, eds. 2009. Citizen Journalism: Global Perspectives (Vol. 1). Frankfurt am Main: Peter Lang.

Aufderheide, S. 1993. Media Literacy: A Report of the National Leadership Conference on Media Literacy. Aspen, CO: Aspen Institute.

Baldry, Anthony, and Paul John Thibault. 2006. Multimodal Transcription and Text Analysis. London: Equinox.

Barrett, Hazel. 2014. "Work Placement Learning." Journalism Education 3 (2): 55–77.

Bateman, John. 2008. Multimodality and Genre. A Foundation for the Systematic Analysis of Multimodal Documents. New York: Palgrave-Macmillan.

Bateman, John, Judy Delin, and Renate Henschel. 2002. "A Brief Introduction to the GeM Annotation Schema for Complex Document Layout." Proceedings of the 2nd Workshop on NLP and XML (NLPXML-2002) - Post-Conference Workshop on the 19th International Conference on Computational Linguistics (COLING-2002), 13-20. Taipei, Taiwan.

Benjamin, Robert, and Rolf Wigand. 1995. "Electronic Markets and Virtual Value Chains on the Information Superhighway." Sloan Management Review 36 (2): 62–78.

Bianco, J. S. 2009. "Social Networking and Cloud Computing: Precarious Affordances for the 'Prosumer.'" Women's Studies Quarterly 37 (1-2): 303–312.

Bruns, Axel. 2008a. Blogs, Wikipedia, Second Life: From Production to Produsage. New York: Peter Lang.

———. 2008b. "The Future is User-Led: The Path towards Widespread Produsage." Fibreculture Journal 11: 1–9.

———. 2007. "Produsage: Towards a Broader Framework for User-Led Content Creation." Proceedings Creativity & Cognition 6: 1–7.

Carpentier, Nico. 2009. "Participation Is Not Enough: The Conditions of Possibility of Mediated Participatory Practices." European Journal of Communication 24 (4): 407–420.

Castells, Manuel. 2000. The Rise of the Network Society. San Francisco: Wiley.

———, ed. 2005. The Network Society: A Cross-Cultural Perspective. Northampton, MA: Edward Elgar.

Christ, W. G. and W. J. Potter. 1998. "Media Literacy, Media Education, and the Academy." Journal of Communication 48 (1): 5–15.

Coleman, Stephen. 2001. "Online Campaigning." Parliamentary Affairs 54 (4): 679–688.

Comor, Edward. 2011. "Contextualizing and Critiquing the Fantastic Prosumer: Power, Alienation and Hegemony." Critical Sociology 37 (3): 309–327.

Endres, D., and S. Warnick. 2004. "Text-Based Interactivity in Candidate Campaign Web Sites: A Case Study from the 2002 Election." Western Journal of Communication 68 (3): 322–342.

Ette, Mercy, and Ruth Stoker. 2014. "Exploring Experiential Learning through Blogging." Journalism Education 3 (2): 91–102.

Foot, K. A., and S. M. Schneider. 2002. "Online Action in Campaign 2000: An Exploratory Analysis of the U.S. Political Web Sphere." Journal of Broadcasting and Electronic Media 46 (2): 222.

Fowler-Watt, Karen. 2014. "Professional Perspectives: Placing Lived Experience at the Heart of Journalism Education." Journalism Education 3 (2): 78–90.

Franklin, Bob. 1997. Newszak and News Media. London: Arnold.

Gibson, Rachel, and Andrea Römmele. 2001. "Changing Campaign Communications: A Party-Centered Theory of Campaign Communication." The Harvard International Journal of Press/Politics 6 (4): 31–43.

Hallin, Daniel, and Paolo Mancini. 2004. Comparing Media Systems: Three Models of Media and Politics. Cambridge, MA: Cambridge University Press.

Knight, P., and M. Yorke. 2004. Learning, Curriculum and Employability in Higher Education. London: Routledge Falmer.

Kolb, D. A. 1984. Experiential Learning: Experience as the Source of Learning and Development. New Jersey: Prentice Hall.

Kraidy, Marwan. 2005. Hybridity, or the Cultural Logic of Globalization. Philadelphia: Temple University Press.

Kress, Gunther. 2010. Multimodality: A Social Semiotic Approach to Contemporary Communication. London: Routledge.

Lemke, Jay. 1998. “Multiplying Meaning: Visual and Verbal Semiotics in Scientific Text.” In Reading Science: Critical and Functional Discourses of Science, edited by J. Martin and R. Veel, 87–113. London: Routledge.

Livingstone, Sonia. 2004. “Media Literacy and the Challenge of New Information and Communication Technologies.” The Communication Review 7 (1): 3–14.

Luke, C. 1989. Pedagogy, Printing, and Protestantism: The Discourse on Childhood. New York: State University of New York Press.

McChesney, Robert. 1999. Rich Media, Poor Democracy: Communication Politics in Dubious Times. Chicago: University of Illinois Press.

McLuhan, Marshall. 1960. “Effects of the Improvements of Communication Media.” The Journal of Economic History 20 (4): 566–575.

McQuail, Dennis. 2005. Mass Communication Theory. London: Sage.

Norris, Sigrid. 2004. “Multimodal Discourse Analysis: A Conceptual Framework.” In Discourse and Technology: Multimodal Discourse Analysis, edited by P. Levine and R. Scollon, 101–115. Washington: Georgetown University Press.

O’Reilly, T. 2007. “What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software.” Communications & Strategies 65 (1): 17–38.

Peters, Chris, and Tamara Witschge. 2015. “From Grand Narratives of Democracy to Small Expectations of Participation.” Journalism Practice 9 (1): 19–34.

Pew Research Center. 2012. “Trends in News Consumption 1991–2012.” Accessed March 12, 2015. http://www.people-press.org/files/legacy-pdf/2012NewsConsumptionReport.pdf.

Ritzer, G., and N. Jurgenson. 2010. “Production, Consumption, Prosumption.” Journal of Consumer Culture 10 (1): 13–36.

Ritzer, G. 2007. The Globalization of Nothing. London: Sage.

Sabato, L. J. 1991. Feeding Frenzy: How Attack Journalism Has Transformed American Politics. New York: The Free Press.

Schon, D. A. 1995. The Reflective Practitioner. Surrey: Ashgate.

Seizov, Ognyan. 2014. Political Communication Online: Structures, Functions, and Challenges. New York: Routledge.

Swales, John. 1990. Genre Analysis: English in Academic and Research Settings. Cambridge, UK: Cambridge University Press.

Tameling, Klaske, and Marcel Broersma. 2013. “De-Converging the Newsroom: Strategies for Newsroom Change and Their Influence on Journalism Practice.” The International Communication Gazette 75 (1): 19–34.

Thibault, Paul John. 2001. “Multimodality and the School Science Textbook.” In Corpora Testuali per Ricerca, Tradizione e Apprendimento Linguistico, edited by C. Torsello-Taylor, G. Brunetti, and N. Penello, 293–325. Padua: Unipress.

Thorne, S. 2008. “Computer Mediated Communication.” In Encyclopedia of Language and Education, edited by N. Van Deusen-Scholl, 1–12. Berlin: Springer.

Tofler, Alvin. 1980. The Third Wave. London: Collins.

Williams, J. B., and J. Jacobs. 2004. “Exploring the Use of Blogs as Learning Spaces in the Higher Education Sector.” Australasian Journal of Education Technology 20 (2): 232–247.

Willis, J. 2010. The Mind of a Journalist. London: Sage.

Xenos, M., and K. Foot. 2005. “Politics as Usual, or Politics Unusual? Position Taking and Dialogue on Campaign Websites in the 2002 U.S. Elections.” Journal of Communication 55 (1): 169–185.

Zaller, John. 2003. “A New Standard of News Quality: Burglar Alarms for the Monitorial Citizen.” Political Communication 20 (2): 109–130.