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# Language, Ideology, and Critical Digital Literacy

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## Abstract

Technology has revolutionized the way we produce and exchange information and developed new modes of communication and socialization. Implicated in relations of power, these digitally mediated practices are not ideologically neutral. They shape the representation of meanings and identities, the circulation of knowledge, the construction of social networks and formations, redefining notions of private and public space, while privileging and marginalizing ideas, cultures, and people. As technology increasingly becomes an integral component of learning, this chapter asserts that learners must develop a *critical digital literacy* to become more aware of how power operates in digital spaces, shaping ways of thinking and doing that are implicated in social and cultural reproduction. By sharpening this critical lens, learners equip themselves with the capacity to examine linguistic and nonlinguistic features of digital media, their biases and assumptions, in order to verify information and access the truth.

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## Keywords

Critical Literacy • Digital Literacy • Language • Power

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## Introduction

Technology has instigated a fourth revolution in knowledge production (Harnad 1991), and by accelerating the speed through which ideas are processed and shared, it fortifies a knowledge economy where the production, distribution, and exchange of information are vital. As people and ideas traverse transnational spaces with greater fluidity, new means of representation and spaces of socialization also provide greater opportunities for the construction of identities and networks. These practices of “communicating, relating, thinking and ‘being’ associated with digital media” (Jones and Hafner 2012, p. 13) or *digital literacies* have not only reconfigured epistemological and social landscapes but also transformed identifications, allegiances, and notions of citizenship. As social practices (Street 2003), these new literacies are implicated in the power structures of the different contexts where they are developed, performed, and valued (Heath and Street 2008; Norton and Williams 2012; Prinsloo and Rowsell 2012; Warschauer 2009). To examine how power operates in these multiple spaces requires a more critical understanding of the “differentiated, situated and enculturated ways in which digital practices happen” (Snyder and Prinsloo 2007, p. 173).

Because of the shared capacity to construct, redesign, and disseminate information through the digital, truth becomes more open to interpretation and reinvention. In an era of “post-truth,” not only is knowledge acquisition now more contextual and situational (Luke 2014), but the ideological mechanisms that govern the production of truth within digital spaces become more invisible. To dissect how power operates in these processes of digital production, consumption, and socialization, learners need to develop a *critical literacy* that will allow them to filter through the abundance of information, to contest, deconstruct, and critique in order to discover legitimate knowledge (Luke 2003). Recognizing how language and other symbolic forms can be a powerful means to maintain and reproduce modes of exclusion, critical literacy also confronts how issues of access, diversity, and design are implicated in structures of power (Janks 2000), shaping identities, relationships, and interactions in unequal ways. As a convergence of both digital and critical literacies, *critical digital literacy* examines how the operation of power within digital contexts shapes knowledge, identities, social relations, and formations in ways that privilege some and marginalize others. It equips learners with the tools to examine the linguistic and nonlinguistic features of digital media, to identify their embedded biases and assumptions, in order to access the truth.

To examine more critically how technology facilitates the reconfiguration of knowledge and the social order, one needs to be aware of the various perspectives that surround it. On one end of the spectrum, technological dystopianism asserts that it diminishes our ability to communicate and interact meaningfully, and is responsible for shorter attention spans, language deterioration, and erosion of privacy. Technological utopianism, on the other hand, subscribes to the idea that it contributes only to progress and greater freedom. The limitation of these absolute positions is that it succumbs to a determinism that views technology as one that ultimately controls ways of thinking and social practices. Ignoring the power of technology in transforming societies and regarding it as ideologically neutral, however, would be an enormous oversight (Jones and Hafner 2012). By asserting that technology operates through power, critical digital literacy needs to strike a balance between these views, and proceed from an understanding that while technology has the capacity to empower and liberate, it also has the capacity to exclude and marginalize others (Darvin 2016).

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## Early Developments

When electronic text forms and practices were just beginning to change the communication landscape, Peters and Lankshear (1996) called for a critical literacy that would respond to the shifting textual environment and challenge “enclosed” forms of consciousness. Highlighting the dematerialized, interactive, integrative, and manipulable nature of the digital text, these scholars explained how these features enabled greater intertextuality and hybridity, while posing new possibilities and challenges for language and literacy education. Recognizing the attendant dangers of the new digital environment – increased state surveillance, vulnerability to breakdown and sabotage, and risks of cultural imperialism, the paper posited the need for a critical literacy that continually analyzed and evaluated how the digital transforms not only textual and discursive practices, but ultimately ways of doing and being.

In the same year, the New London Group (1996) highlighted how the increasing variety of text forms linked to information and multimedia technologies had great implications for teaching literacy. In proposing a pedagogy of multiliteracies, this group articulated critical framing as an important objective. Through this goal, learners are able to link situated practice and overt instruction to the “historical, social, cultural, political, ideological, and value-centred relations of particular systems of knowledge and social practice” (p. 34). Recognizing that website content may manipulate readers and obscure an ideological agenda, Labbo et al. (1998) pointed out how digital literacy requires being both a critical consumer and producer of information. They defined critical digital literacy as “the ability to recognize, interpret, and evaluate underlying ideologies in various types of hypertextually linked information as it is presented in various data sources” (p. 282). Primarily concerned with being able to bridge the digital literacies learned at school with those required in the workplace, the authors assert that this critical approach is necessary to

strategically navigate through data, and that teachers need to receive the support necessary to develop these literacies.

Luke (2003) observed that with new media, meaning making and knowledge are deterritorialized, and that the fluidity and plurality of engagement are marked by simultaneous decoding, production, and interactional contexts. Making meaning from hypertexts thus require greater lateral thinking – a cognitive mobility across disciplines, genres, modalities, and cultural zones. Recognizing the risks and potential of information and communication technologies (ICTs), Luke proposed a critical ICT literacy that would include “a metaknowledge, a critical and self-reflective analysis of the sociocultural and political contexts of ICTs at global and local levels” (p. 399). Beyond skills training and use of collaborative tools, she asserted the need for critical analyses of power relations, identity politics, and language generated by and through engaging with technology. Challenging the assumption that online communication is hierarchy-free, she believed there should be a way to investigate whether this equity exists, and if students of different cultural or linguistic backgrounds are able to participate freely in these spaces. Activating this critical ICT literacy requires a metaknowledge, a self-reflective analysis of the sociocultural and political contexts of technologies at local and global levels. As online literacies evolve, educational theorizing and research must devise more flexible concepts and methodologies that involve a provisional and transformational epistemology.

In a report on media education in the twenty-first century, Jenkins (2006) suggested that new media literacies should be considered a social skill and that to engage within participatory cultures should involve a capacity to think critically about information that is shared within these diverse spaces. Learners need to acquire a critical understanding of how media representations “structure our perceptions of the world, the economic and cultural contexts within which mass media is produced and circulated, the motives and goals that shape the media they consume” (p. 31). By developing a critical awareness of how media frames worldviews and reshapes experience according to its code and conventions, learners are able to evaluate the quality of information technology has made highly accessible. Drawing from Giroux’s (1994) notion of critical pedagogy, Merchant (2007) identified critical digital literacy as an important component of literacy education. Developing a critical lens is a responsibility of the educational system, and this entails providing learners with tools to analyze discourses related to wider social issues, power relationships, and inequities. While there is a need to nurture and preserve new digital spaces, there should also be a means to understand their constructed nature. As learners participate in these spaces, critical digital literacy enables them to critique and challenge the dominant discourses circulating within these domains.

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## Major Contributions

As a construct, critical digital literacy continues to be labeled and interpreted in different ways and for different ends. Developing a vision for student success in the new global economy, The Framework for twenty-first Century Learning (Partnership

for 21st Century Skills 2011) identify information, media, and ICT literacies as including both functional and critical thinking skills. In this context, developing new literacies is viewed as necessary to participate as a productive member of the knowledge economy. Concerned with how technology contributes to the collective intelligence in a knowledge society, Poore (2011) refers to these two tiers of digital literacy. Functional digital literacy deals with developing technical skills and changing mindsets and attitudes towards technology through workshops and training. Critical digital literacy, on the other hand, examines digital contexts in a more cultural sense and requires having teachers equipped with philosophical and ethical frameworks for understanding digital cultures. As teachers guide learners through the emerging knowledge space, they need to help bridge a digital divide constructed by differential access to information, relationships, and networks.

Addressing this gap is also important to Facer (2011), who believes critical skills are key to building strategic knowledge that will contribute to social change. Given the ubiquity of online information, learners need to develop the capacity to discern the relationship of information to other information, to goals and interests, and to the contexts in which it is used. By understanding how the management of information flows impacts the lives of other people, learners are able to participate in a new culture of informal learning where technology can transform homes, neighborhoods, and workplaces into an integrated learning society that benefits diverse groups of people.

Because new technologies provide an immersive, interactive experience, Wohlwend and Lewis (2011) use *critical engagement* to describe the critical interpretation and production of digital literacies. As visual and embodied texts and virtual spaces circulate through global flows, they become both universalizing and fragmenting. Critical engagement enables an examination of how the motives of information and communication providers can shape the dissemination of knowledge, how participatory cultures can expand or limit the construction of texts and social networks, and how power relations are inscribed in the practices and norms of digital environments. Subscribing to the notion that emotion is structured through ideology, these scholars posit that the critical interpretation and production of digital literacies is bound to complex desires, and should therefore examine how digital practices are tied to expressions of passions, attachments, and affiliations.

Because digital media does not just enable the production and consumption of texts, but facilitates ways of thinking, relating, and interacting with others, critical digital literacy encompasses these affordances. Research in this area examines how power and ideology operates in the digital practices of representing identities, producing and circulating knowledge, constructing social networks and formations, and managing control and access.

## **The Representation of Meaning and Identities**

At the very heart of critical literacy is the examination of how meanings are represented in ways that maintain and reproduce relations of power. While the

deconstruction of texts can reveal subtexts of power, digital technologies provide means of representation that conceal ideology in new ways. Through wizards, templates, drop-down menus, and preference settings, a semblance of personalization is manufactured to provide the user with a sense of freedom and autonomy. Although multiple and diverse, these affordances are never objective as they channel, and potentially limit, the meanings and representations one can make. To fit into the coding logic of these sites, there is always a predefined set of alternatives that prohibit finer gradations of meaning users can control. These default settings and “givens” steer users to a set of normative behaviors and meanings, indoctrinating users into social practices that are technologized around digital tools (Jones and Hafner 2012). Because Facebook is in the business of selling data about users to advertisers, the default categories users are made to fill out on their profiles (e.g., favorite books, movies, music) also encourage disclosure of personal interests that serve Facebook’s commercial motives. The highlighting of how many friends one has or the number of likes a post receives becomes a way of quantifying popularity, encouraging particular ways in which people communicate with each other and curate their identities. In a study of storytelling styles on Facebook, for instance, Page (2012) observes the frequent use of an affective discourse style marked by a high degree of intensification. Capitalization, repeated exclamation marks, repetition, exaggerated quantifiers like *all* and *everyone*, and frequent use of boosters, e.g., *very*, *really*, *so* are used to report on quotidian events. This linguistic pattern of intensification demonstrates how users believe some form of exaggeration is needed to make their stories “tellable” on social media. In this sense, the range of actions enabled by digital tools promotes particular constructions of self and language use.

## The Circulation of Knowledge

Another way technology can limit the perception of the world is the systematic filtering of knowledge through algorithms. While people generally regard the Internet as open arenas where free exploration is the norm, online search technologies choose routes that are determined by programmed algorithms. The algorithmic assessment of information represents a specific logic built on certain presumptions of what knowledge is and the categories in which specific information belongs. By deciding what the categories are and what belongs in each one, this fundamental component of database design and management becomes a powerful semantic and political intervention. It makes assertions of the nature of things, while concealing these evaluative criteria, which are held as trade secrets. The “trending” algorithm of Twitter, for instance, cannot be made public because this would leave them vulnerable to those who may want to manipulate the system to get their sites to the top of the search results or want their hashtags to appear on the trends list (Gillespie 2014). Because of these conditions, the algorithm becomes a legitimate knowledge logic, where commercial interests are integrated and protected. Search directory editors and website designers lobby for specific sites and sponsored links to appear at the top of search results. Some studies have also noted how structural biases of search

engines can prioritize commercial information providers and English language sites (Granka 2010). By operating through these biases, public search tools lead to a hegemonic rationality that privileges certain sources of information, while excluding others (Kirkpatrick 2008).

## **The Construction of Social Networks and Formations**

By calculating what is trending or popular, social networking sites do not only control the circulation of knowledge, they also shape social and political discourse and the publics in which people participate (Gillespie 2014). In a news service, the information that is pushed is tailored to the user's preferences, consequently undermining the diversity of public knowledge and political dialogue. Because of these algorithms that direct users towards likeminded people, they enter into "filter bubbles" where one finds the news one expects and political perspectives one already subscribes to (Pariser 2011). This filter exists in Facebook News Feeds as well where results are based on algorithmic calculations that push status updates and activities of friends whom one already interacts with the most by liking and commenting on their posts. By ranking "objects" like an uploaded photo and "edges" (i.e., interactions), Facebook algorithms shape the interaction of friends through a programmed sociality based on findability and compatibility (Bucher 2013). The construction of online spaces of socialization also enables a mobility that fuels a "networked individualism" where people are linked by scheduling, monitoring, surveillance, and regulation. This individualism transforms life strategies while exerting new demands on the self. Unbounded and deterritorialized, identities are no longer tied to fixed localities, patterns, or cultural traditions (Elliott and Urry 2010), and are able to participate in communities of interest that transcend national boundaries. These communities tend to attract people from similar professions, educational backgrounds, values, or lifestyles. As people build these transnational networks, people can interact less with those from other social positions within their own local communities and country, reshaping their allegiances and sense of co-citizenship (Gee and Hayes 2011; Warriner 2007).

## **Issues of Control and Access**

While earlier views of the Internet recognized it as a decentralized and unregulated space, Sassen (2008) points out how surveillance and management processes are often overlooked. Governments are able to establish technical and operational standard settings that enable agencies to collect data and engage in multiple forms of surveillance. Corporations also privatize capabilities within the Internet that support their interests. While the earlier Internet allowed open access to most spaces, the growth of intranets and e-commerce have facilitated "zoning," which limits access to or distribution of goods and services on the Internet. Apart from the ideologically laden processes of search engines, there have also been attempts by

government agencies and private corporations to undermine net neutrality. By invoking the need to control information traffic for greater efficiency, phone carriers have proposed that Internet content can be delivered at variable rates. Such a proposition would have tremendous implications on access to knowledge as powerful entities that can afford prioritized delivery service can push information that serves their own interests (McKee 2011). This attempt to control the flow of information is also reflected in the cost-free access to the Internet offered by Airtel Zero and Facebook's Internet.org. Marketed as corporate social responsibility efforts, these initiatives enable economically underprivileged users to connect to the internet. This connectivity however is limited to specific sites and applications, thus restraining the knowledge and social networks these users can access (Murthy 2015).

Apart from institutional and corporate mechanisms of control, differential access not only to technology but also digital literacies is an important concern of critical digital literacy. While a great percentage of the population is still not connected to the Internet, Prinsloo and Rowsell (2012) have also pointed out that when technologies travel and are located in new spaces, particularly in the global periphery, how these resources are used can be subject to a number of restraints. They become "placed resources" in that the specificity of place, its material conditions and social practices, largely determine the use and benefits of these resources. This research extends this notion of placed resources to how even within a local context there are a variety of ways in which technology is taken up in specific settings like home and school. In a comparative case study of two adolescent migrant Filipino learners from different social class positions in Vancouver, Darwin and Norton (2014) examine how differences in economic, cultural, and social capital can shape divergent digital literacies and language use. While both learners had similar access to devices, the differences in mentors, home literacies, and social networks can shape their perceptions of what technology is for and how they should use it. In this sense, learners of different socioeconomic backgrounds are socialized into specific digital practices that can either facilitate or disable upward social mobility.

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## Work in Progress

Drawing from the New London Group's (1996) conception of design as a key component of literacy education, Pangrazio (2016) proposes *critical digital design* as a political model of digital literacy where understandings of discourse, ideology, and power are scaffolded in the critique. Multimodal features of digital texts are analyzed in parallel with the general architecture of technology and the Internet to dissect how these structures reproduce systems of power and privilege. Rather than focusing on specific technologies, the critical framework also begins with a more personal position that reflects on one's beliefs and emotions and refers to individualized practice. Recognizing that ideology is intrinsic to the affective experiences of texts, it links personal responses to digital texts to broader ideological concerns. Through a "transcendental critique," (p.8) learners create a sense of distance from



digital media by decontextualizing everyday use and reassessing their relationship with it. Pangrazio is currently testing the viability of this framework through a study that integrates visualization, self-reflection, and transcendentalism. The hope is that the findings of this study will establish an evidence-based framework for critical digital design.

Recognizing the value of critical digital literacy, Santo (2013) has proposed the term *hacker literacies* to refer to how users can go beyond critique by actively resisting and reconfiguring networked public spaces. Through the dialectical relationship of the social and the technical, digital spaces are malleable, open to reformulation and reconfiguration. Learners are encouraged to be hackers, not in any malicious or unethical sense, but to encourage them to collaborate and tinker with technology and to actively resist systemic patterns of control by powerful entities. Hacking practices could include designing and advocating for alternative models of privacy settings for Facebook and instigating group action where users intentionally alter their Facebook profiles to disrupt the marketing data the networking site sells to companies. Reclaim Privacy, an open-source method of raising awareness of Facebook privacy settings, created a technical response to Facebook's complex privacy interface. Through media watchdog groups and voices in academia, the blogosphere, and afterschool digital programs (Dooley and Exley 2015), learners are able to participate in subcultures that are able to challenge the hegemonic control of established sites. By learning basic coding, game modding, and do it yourself (DIY) approaches, they are able to push back against existing designs of mainstream companies and resist their hegemonic stranglehold.

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## Problems and Difficulties

A significant challenge to developing a critical digital literacy is that because digital media is so interwoven into the lives of learners and their personal and affective experiences, it makes it difficult to stand back and take a more critical stance. To reconcile the personal with the ideological requires an awareness of how digital texts provoke strong emotions precisely because they reference a meaningful yet ideologically circumscribed experience. Understanding the ideological architecture of the digital is difficult because its technical foundation is complex and opaque, and in schools, developing skills in navigating digital tools are prioritized over critiquing them (Pangrazio 2016). In a study that examines the way young people use Facebook, Pangrazio (2013) also suggests that the highly visual nature of the medium together with the invisibility of the audience pressure young people to adapt to the perceived conventions of the social networking site, rather than to question them. While the participants were able to see how the site shaped their view of others, it was more difficult to see how it shaped their own view of themselves. Critiquing the digital practices around Facebook requires standing outside the discourse. The banning of Facebook in some schools, however, disables the possibility of critical analysis in classrooms. In some cases, literacy curricula do

not just ignore but stigmatize the literacy practices in these social networking sites (Thorne 2013).

Another challenge in developing this critical digital literacy is that it necessitates an understanding of complex technical processes and political economic mechanisms. Luke (2014) points out that mere digital engagement is not a critical literacy approach. Critical literacy uses media “to analyze, critique, and transform the norms, rule systems, and practices governing the social fields of institutions and everyday life” (p. 20). It seeks to reshape political consciousness, material conditions, and social relations, and examines how new literacies can transform both local and geopolitical relations of power. Because they are developed through a historical materialist lens, critical literacies have no universal model and are contingent on local realities. As digital practices of knowledge circulation, identity representation, and social network construction are carried out within capitalist infrastructure and are implicated in consumer culture, the power asymmetries of digital contexts intersect with a complex political economic order. The challenge in dissecting these contexts is that it requires a new vocabulary to critique the economic structures, flows, and forces through which the digital thrives. At the same time, a critical approach also involves an examination of the complex interplay of information processing, software dynamics, linguistic processes, and cultural practices that are at work within these digital platforms. Software has become a technocultural actor that shapes users’ cultural experiences of and through the web and reflects assumptions of roles, hierarchies, and practices. To examine how these biases and assumptions are embedded in digital platforms thus requires technical knowledge that is not highly accessible (Langlois 2013).

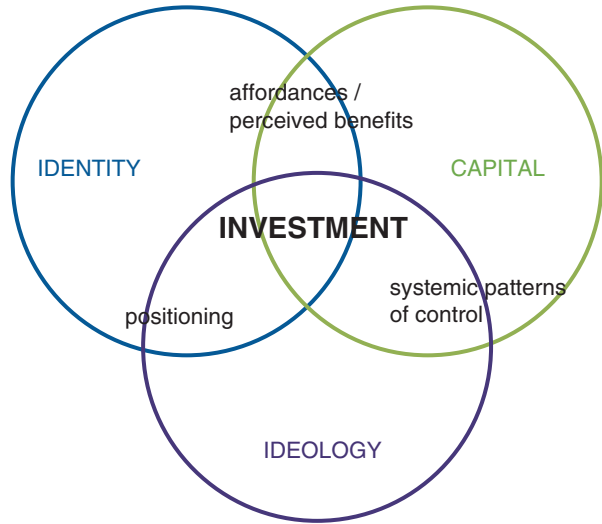
Apart from the challenge of developing technical and political economic knowledge, Pangrazio (2014) points out that current terms in digital studies mask their ideological underpinnings and impede critical thought. Labels such as “participatory culture” (Jenkins 2006) and “networked public” (Boyd 2014), for instance, connote freedom, democracy, and civic engagement while concealing the gatekeeping measures and fragmented nature of these spaces. The word “user” reflects neoliberal ideology that positions the individual as a consumer of resources rather than an engaged citizen. To challenge these connotations, critical discourse analysis needs to dissect assumed meanings of concepts like *free*, *friend*, *link*, *like*, and *open* in digital contexts and to rearticulate these concepts with a counterhegemonic impetus.

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## Future Directions

Responding to the need for a more critical understanding of how power operates in digital contexts, Darvin and Norton (2015) have developed a model of learning that locates investment at the intersection of identity, capital, and ideology (See Fig. 1). Extending theories of identity and investment developed in Norton’s earlier work (Norton Peirce 1995; Norton 2013) to address the realities of a digital age, the model recognizes that as learners retreat into private, isolated spaces and navigate both online and offline worlds, the mechanisms of ideology become more invisible. This

**Fig. 1** Darwin and Norton's 2015 model of investment



opacity makes it increasingly difficult to recognize how specific communicative events are indexical of macrostructures of power. To respond to this challenge, this model of investment highlights how, as learners move fluidly across spaces, ideologies collude and compete, shaping the identities of learners and positioning them in different ways. The value of their economic, cultural, or social capital also shifts as it travels across time and space, and is subject to the systemic patterns of control of institutional structures and processes. By laying bare the interplay of these different forces, the model can serve as a framework for critical digital literacy that examines the operation of power in the digitally mediated construction of knowledge, identities, and social networks.

Instrumental also to developing this criticality, Darwin and Norton (2015) speak of cultivating a *sens pratique* or practical sense that enables learners to know the “rules of the game,” or the mechanisms of power that control digital contexts. Borrowing from Bourdieu (1986), this practical sense enables learners to (i) master the rules, norms, genres, and multimodal features specific to different communicative contexts; (ii) seamlessly shift linguistic codes, practices, and strategies while moving across spaces; and (iii) use linguistic and nonlinguistic resources to gain access to, challenge, and transform these spaces. By repeatedly performing these repertoires and strategies with greater autonomy, learners are able to sharpen their critical lens and navigate different ideological landscapes. Being aware of the linguistic and nonlinguistic features of online genres also help learners to recognize credible news sources and identify online hoaxes. Also borrowing from Bourdieu, Thorne (2013) speaks of the need for literacy education to develop a “generative disposition” among learners by socializing them into ethical standards and raising their awareness of how media shapes perception. Through this cultivated disposition, learners are not only able to identify and work with regularities, selection

biases, and performative conventions but also to shape and transform the digital spaces they participate in.

Recognizing how digital practices have the power to privilege some and marginalize others, Hull and Stornaiuolo (2014) have invoked the construct of cosmopolitanism to guide digital production and consumption. By enabling a “global culture of open-mindedness” (Hansen 2010) and an awareness of one’s role as “citizen of the world,” cosmopolitanism calls for an understanding of the ethics of communicating and participating in a digitally mediated world. Hence, while critical digital literacy exposes how power operates in this world, cosmopolitanism shapes dispositions that allow learners to navigate this world with greater respect and responsibility. It enables them to value diverse knowledges, cultures, and identities, and develop a greater openness to the world (Delanty 2006), while addressing the material inequalities that circumscribe it. By complementing critical digital literacy with a cosmopolitan imagination, learners are able to understand that critique is not an endpoint, but a means to achieve genuine social transformation in an increasingly digital world.

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## Cross-References

- ▶ [Literacy and Identity in Mediated Contexts of Transnationalism and Mobility](#)
- ▶ [Multilingualism and Multimodality in Language Use and Literacies in Digital Environments](#)

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## Related Articles in the Encyclopedia of Language and Education

- Brian Street: [New Literacies, New Times: Developments in Literacy Studies](#). In Volume: Literacy
- Kevin Leader and Cynthia Lewis: [Literacy and Internet Technologies](#). In Volume: Literacy

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