"The Total Pattern of the World": Misinformation across the Curriculum (MAC) and the Next Fifty Years of Higher Education

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Two interrelated epistemological crises face colleges and universities in the United States right now; they will almost certainly play a major role in shaping higher education for the next fifty years and beyond. First, the historical confluence of abundant digital media (including social media) with extreme political polarization and the explosion of information communication technologies (ICTs) over the last twenty years has led to what some call a "post-truth" moment (Ball, 2017; McComiskey, 2017; McIntyre, 2018), where the way information makes us *feel* is now more important (and more relevant) than whether or not it is true, accurate, or complete. "Fake news"[1]—or, more precisely, *problematic information* (Jack, 2017), and the *information disorder* (Wardle and Derakhshan, 2017) that is a direct result of it—is both a consequence and a driver of this so-called post-truth moment (Kavanagh and Rich, 2018). According to an AP-NORC poll from October 2022,

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1. Throughout this article, I place "fake news" in quotation marks to acknowledge the many diverse (and often contradictory) ways the term is used today and the fact that "fake news" has been widely disputed by scholars and journalists alike since its resurgence in 2016 (boyd, 2017; Giuliani-Hoffman, 2017; Sullivan, 2017; Tandoc et al., 2018; Wardle, 2017). The use of quotation marks represents my attempt to signify both the terminological complexity and the hyper-politicization of "fake news," as seen in its use by politicians (most notably Trump) to cast doubts on anything that the speaker does not want to validate. As a term, "fake news" is a blunt instrument, an overly simplistic moniker for a dangerous panoply of disinformation, misinformation, malinformation, propaganda, misleading content, and manipulated media that can occur in a variety of modalities (memes, images, videos, deep fakes, etc.). However, it remains widely used in public discourse. (In 2017, "fake news" was named word of the year by Collins Dictionary.) For more on the recent deployments of "fake news" and its history alongside problematic information generally, see McNair (2018) and Cook (2023). For more on the precise terms and typologies scholars use to talk about "fake news," such as problematic information (Jack, 2017), information disorder (Wardle and Derakhshan, 2017), manipulated media (Marwick and Lewis, 2017), network propaganda (Benkler et al., 2018), and network climate change/information pollution (Phillips and Milner, 2021), see the texts cited in this sentence. In this article, I follow Marwick (2018, pp. 476-481) in using the terms "*fake news*" and *problematic information* interchangeably as umbrella terms for all manner of misleading media messages.

91% of American adults say the spread of misinformation is a problem, with 74% identifying it as a major problem (Klepper, 2022). Just as problematic information is rampant, people are also overwhelmed by information plenitude (Alexander, 2020; Bolter, 2019)—that is, too much information—and the media landscapes we inhabit appear hopelessly polluted with the flotsam and detritus of hyper-partisan digital polarization (Phillips and Milner, 2021).

At the same time, colleges and universities in the United States appear to be under fire from just about everybody. Some commentators charge that higher education has been fighting the same political battles for half a century with little to no improvement (Schrecker, 2022). The public has lost faith in higher education as both a knowledge center and a guarantor of America's contract with the middle class (Newfield, 2008), while faculty find their hard-earned expertise questioned by everyone, from first-year students to career politicians (Nichols, 2017). These fault lines existed before the pandemic, of course, but COVID-19 cast them into sharp relief: enrollments have declined precipitously since the pre-COVID era, and those who remain—including faculty and staff—express what one journalist has called a "stunning" degree of dissatisfaction, apathy, and burnout (McMurtrie, 2022). In addition to accusing higher education of ideological hyper-partisanship, those on the Right actively work to diminish the public's trust in academic institutions and push back against their ability to function independently of state governments (Cantwell and Taylor, 2022), the majority of which are controlled by Republicans.[2] The pandemic exacerbated existing racial and socio-economic inequalities related to access and the digital divide (Francis and Weller, 2022); it also pointed to a confidence problem and questions about the quality of education, while tuition and student loan debt spiral ever upwards. Arguments about the value of a liberal education as a common good or humanizing force have become tired and more than a little quaint (Fischer, 2022).

This is the bleak institutional, cultural, and political context in which writing across the curriculum (WAC) finds itself in 2023. However, *there is hope*. In what follows, I argue that precisely because of its status as an epistemological chameleon, its half-century reputation as a stalwart of progressive politics, and its proven track record as a multidisciplinary coalition builder (among other enduring qualities), WAC has been able to keep pace with systemic upheavals both in the university and in the wider culture. More specifically, WAC provides epistemological, institutional, ideological, and pedagogical-curricular frameworks for teaching digital media literacy (broadly construed) across disciplines due to the following investments and achievements: (1) WAC's longstanding commitments to social justice work and progressive

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2. At the time of writing, in August 2023, Republicans control 54.94% of all state legislative seats nationally, while also holding twenty-two state government "trifectas," which means that a single political party controls the governorship and both legislative bodies (Ballotpedia, 2023).

politics, (2) the epistemological and institutional paths that WAC has already carved out in the academy and via WAC's relationship to disciplinary ways of knowing, and (3) WAC's rich storehouse of pedagogical theory and practice.

WAC: Then and Now

How fitting that writing across the curriculum (WAC) as a contemporary movement in higher education can be traced back to, of all things, a Milton seminar in the 1969-70 academic year that failed to "make" enrollment. Given the well-documented decline of the humanities since 1970 (Cvejic et al., 2016; Spellmeyer, 2003), it feels almost scripted that a planned seminar on Milton would give way to something as practical and earthbound—yet ultimately transformative—as improving writing instruction across the academic disciplines. (*Paradise Lost*, indeed.) If the last fifty years of WAC were a venerated HBO or AMC series rather than a transdisciplinary movement with peer-reviewed journals, tenure lines, and national organizations, this would no doubt be the dramatic opening scene.

But it really did happen this way, according to some of the top-shelf research on the history of WAC (Bazerman et al., 2005; Russell, 2002). Barbara Walvoord, whose cancelled Milton seminar opened the door for what Palmquist et al. (2020) call the "first informal WAC program in the United States" (p. 7), recalls meeting with fourteen faculty from across the tiny campus of Iowa's Central College to talk instead about student writing and how to improve it. Though they held no looping seminar discussions of Milton's politics or his refusal to use rhyming couplets, Walvoord and her faculty cohort accomplished something truly groundbreaking: they transformed an empty classroom into what would become the modern WAC movement as we know it.

But, of course, tracing origin stories is a slippery business. In fact, as Walvoord herself notes in a video interview for the WAC Clearinghouse, the history of WAC goes back even further to 1930 and Ruth Mary Weeks's "broad definition of English, which encompassed human communication: reading, listening, speaking, and writing" (Bordelon, 2010, p. 258). Weeks had just been elected president of the National Council of Teachers of English (NCTE) a year earlier; and though the groundbreaking report she spearheaded, *A Correlated Curriculum*, has received sparse scholarly attention compared to the more recent history of WAC (Bordelon, 2010, p. 258), the ideas therein were light-years ahead of their time.[3] In the report, which combined pedagogical materials from secondary- and college-level teachers, Weeks (1936) sought to provide a comprehensive curricular blueprint for reform in English teaching that would "integrate classroom activities not only with student experience

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3. Weeks was only the second female to be elected president of NCTE (Bordelon, 2010).

but with each other and with *the total pattern of the world in which we live*" (p. 283; emphasis added).

According to Russell (2002), Weeks's ambition was to "launch a restructuring not only of English teaching but also of the entire school curriculum and, beyond that, of industrial capitalism itself" (p. 210). Weeks championed "collectivism and integration in an era dominated by ideological forces favoring individualism and the specialization of knowledge" (Bordelon, 2010, p. 258). The upheavals of the Great Depression had finally brought educational progressives out of the proverbial wood-work, so to speak, and Weeks, along with other influential progressive educators of the time, "had an *explicit political agenda* behind their curricular reforms: they would use the schools to reconstruct society along what they considered more democratic and cooperative lines" (Russell, 2002, p. 210; emphasis added).

From its earliest moments, the WAC movement was nourished by the founding realization that a single, decontextualized writing course, such as the freshman composition course inaugurated at Harvard in the 1870s, was wholly insufficient to prepare students for the complex, discipline-dependent writing tasks they were being asked to do in their advanced courses (Bazerman et al., 2005; Connors, 1997; Palmquist et al., 2020; Russell, 2002). Progressive-era educators like Weeks imbued WAC with a political bent that was essential for combatting the industrial capitalism of the 1930s. As the American workplace became more specialized and the economy, once centered around farming and industrial manufacturing, gradually shifted to increasingly specialized knowledge work, writing took on an increasingly central role in preparing students for the workplace, citizenship, and life after college (Beniger, 1986; Brandt, 2005).

Palmquist et al. (2020), in their retrospective "Fifty Years of WAC: Where Have We Been? Where Are We Going?," write that "WAC is far from a completed project" (p. 6). "If it is to continue to grow and flourish," they argue, "it must continue to welcome change and growth" (p. 6). Throughout its history, WAC has managed to retain its relevance even as the university around it has been transformed. There are at least three reasons for its success in this area. First, WAC recognized early on that the individual academic discipline is the engine at the heart of the university enterprise. Second, WAC recognizes the centrality of literacy to every academic discipline, and it has developed a sophisticated curricular model and pedagogical apparatus that work across disciplines. Third, WAC provides the progressive politics and commitment to shaping students as political beings that are absolutely essential to future work in higher education (Berlin, 1996/2003). WAC's fifty-plus-year status as a transdisciplinary force in higher education makes it an obvious choice for what I propose to call "misinformation across the curriculum," or MAC. Like writing, every discipline, from history to the health sciences, traffics in problematic information. By taking

on the transdisciplinary problem of information disorder (Wardle and Derakhshan, 2017) and making problematic information its focus, MAC has an opportunity to reinvigorate higher education's social and political mission through a concerted curricular focus on digital media in specific areas of inquiry, while also ensuring that students are prepared for the complex epistemological challenges of what is already a thoroughly postdigital world.

Because of this progressive heritage and its ongoing commitment to helping students see "the total pattern" of knowledge (Weeks, 1936, p. 283), WAC is a curricular and pedagogical movement uniquely suited to tackle large-scale epistemological challenges like "fake news," information disorder, manipulated media, and information pollution. The web and social media have changed everything about how we work, play, live, and engage in political struggle. In the coming years, AI-enhanced internet use will become as pervasive and essential as oxygen. (Indeed, we are well on our way.) Seamless connectivity will be the norm for most people, as it is already for many in the United States and other rich countries (Pigg, 2020). The notion of "unplugging" or "going offline" will no longer make any sense in this new postdigital reality (Berry, 2015, pp. 50-51), and indeed it makes little sense now.[4] MAC will have an essential role to play not only across the landscape of higher education but also in sustaining a healthy democracy and robust public sphere.

But sweeping changes do not occur in a vacuum. In the next section, I briefly rehearse a historical narrative that, though familiar to many in academia, is essential to understanding the neoliberal insistence on privatization and free markets that has come to characterize so much of the workings of contemporary colleges and universities.

US Higher Education Since 1970

The story is a familiar one. In the heady boom years of the 1940s through the 1960s, public universities were truly *public*, which reflected that era's progressive beliefs about higher education as a public good and the reciprocal relationship between an educated society and a healthy democracy. Following World War II, the GI Bill

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4. Case in point: what we used to call "online banking" has, in recent years, become simply "banking." All of it happens online, of course, but we've dropped the adjective in recognition that it is a superfluous descriptor. In a postdigital environment, where our digital tools and interfaces have become ineluctably enmeshed in our lives—such that we no longer see or even think of them, except perhaps in "emergency" situations where they are suddenly and conspicuously absent—the digital is all around us, continuously and osmotically influencing how we understand phenomena and orient ourselves to the world (Berry and Dieter, 2015). This ubiquity of the digital is what scholars mean by "postdigital"—*not* that we have somehow moved beyond the digital, as if digital technologies and media were a thing of the past. For more on the postdigital, see Cramer (2015), Hodgson (2019), and Jandrić (2019).

sent droves of American men (and a few women) into higher education. By the time Walvoord was preparing her Milton seminar at the end of the 1960s, 35%—or roughly one in three—of the eighteen-to-twenty-four-year-old demographic in the United States was enrolled in post-secondary higher education (Snyder, 1993, p. 66). A degree from a public university in 1970 would have cost the average student around $1,459 per year; the state would pick up the rest of the tab (Newfield, 2016).

I don't want to paint too rosy a picture of US colleges and universities at midcentury. They were far from perfect. Racism and sexism were thoroughly systemic then as now—and the vast majority of those who attended America's colleges and universities were white men. Blacks who had served in the military were often steered away from applying for their tuition benefits through the GI Bill or were denied benefits outright (Blakemore, 2021). Enrollments in graduate and professional schools were overwhelmingly white and male. In the 1949-50 academic year, women accounted for just under 30% of total enrollment in higher education (Snyder, 1993), while Black and Brown Americans enrolled in even lower numbers and faced segregationist policies well into the 1970s (Stefkovich and Leas, 1994).

But even with these shameful caveats, the post-war public university, buoyed by generous federal and state appropriations and legitimated by Cold-War anxieties about preserving American identity, was viewed as a trusted institution in the eyes of the public. Gallup first started tracking Americans' confidence in institutions in 1973, and that year 58% of Americans said they had either "a great deal" or "quite a lot" of trust in public education, compared to just 28% in 2022 (Jones, 2022).

In 1970, there was a sense that American universities could be counted on to solve society's most pressing challenges. Some of the nation's largest and most prestigious universities, like Columbia and Berkeley, had provided the stage on which Civil Rights and the antiwar movement had played out nightly on living-room televisions. Stanford and UCLA provided the essential infrastructure for ARPANET, which would in time become the internet and later the world wide web. The afterglow of a successful moon landing a year earlier helped portray STEM fields in a positive light, with space exploration sublimating concerns about Soviet dominance (Shesol, 2022). In other words, US colleges and universities were good places to be in 1970, even if you were in the humanities. And it did not cost a lot of money to be there, either. But Walvoord's cancelled seminar on Milton—the one that ignited the contemporary WAC movement—proved to be the proverbial canary in the coal mine.

That is because no sooner had the university reached its post-war apex—right about 1970, as a matter of fact—it began its slow decline. Global economic shifts, postindustrial capitalism, and changing political winds at home ushered in neoliberal policies that radically changed the face of American higher education (Lorenz, 2012; Newfield, 2008). As the optimism and post-WWII economic largesse of the 1960s

gradually turned to the hard-nosed, inflationary realities of the 1970s, and then to the winner-take-all 1980s, the privatized 1990s, and beyond, the humanities faced a new reality: constantly having to defend their right to exist. When Ronald Reagan became governor of California in 1967, he inaugurated a new way of thinking about the value of a college degree, claiming that taxpayers shouldn't be "subsidizing intellectual curiosity" (Berrett, 2015). As Berrett paraphrases it, "Learning for learning's sake might be nice, but the rest of us shouldn't have to pay for it. A higher education should prepare students for jobs."

Post-1970, the official line on the college degree held that it was a private good—a commodity, really—to be bought and sold on the open market (Fischer, 2022). Student "customers" would of course reap any benefits from the purchase of a college degree, but they would also accept any liens or debts, up to and including a lifetime of crippling financial baggage. The mass expansion of household credit (and household debt) during the same era reflected this new consumerist, market-worshipping approach to what had only a generation earlier been public goods and services (Brown, 2015; Frank, 2001). Higher education became a private risk, and the student loan debt bubble, which has inflated 750% since the mid-1990s, crossed the $1 trillion mark well over a decade ago (Hahn, 2022).

MAC and the Tragedy of the Commons

For more than fifty years, a raft of literacy efforts has played an important role in both K-12 schools and American higher education, but there persists a nagging awareness that these efforts have fallen well short of their lofty goals. Fister (2021b), writing in *The Atlantic*, laments how even after half a century of media literacy, digital literacy, news literacy, civic literacy, information literacy—call it what you will—in the educational curricula of the United States and the Global North, a significant number of people still reject "credible journalist institutions" while "embracing disinformation" in all its various and sundry forms.[5] Why has all this media literacy failed to produce citizens who can adequately separate fact from fiction, truth from lies, reality from "Stop the Steal" or the rich, bogus mythology of QAnon? In another recent essay, Fister (2021a) puts the problem in these stark terms:

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5. I do not want to give the impression here that these various and sundry flavors of literacy are interchangeable—they are not. For example, *digital literacy* typically refers to one's facility with finding, evaluating, and communicating information using digital media, while *media literacy* (and media literacy education) refers to a nearly century-old interdisciplinary movement devoted to empowering students to produce and consume media of all kinds (including print, film, television, and digital texts) ethically and effectively. However, despite their differences, all these capacities contribute to pedagogical efforts to make sense of our all-encompassing relationship to media (Peters, 2015) and especially to the subtle manipulations of mis-, dis-, and malinformation (Wardle and Derakhshan, 2017).

Given years of experience teaching students how to distinguish facts and sound reasoning from political fanfiction and profit-driven humbug, why are so many people unable or unwilling to recognize their claims are nonsense? Why don't they see that their knee jerk rejection of facts that don't fit their preexisting beliefs puts democracy at risk?

Part of the problem is that traditional approaches to media literacy have tended to treat students as naïve consumers of information who, if properly trained, can learn how to pick high-quality information sources for a particular task, like a savvy shopper in the produce aisle picking out the perfect avocado for a next-day guacamole. Caulfield's (2019) widely celebrated SIFT technique, which is based on pioneering research on the efficacy of fact-checking and lateral reading by Wineburg and McGrew (2017), embodies this approach, as do other media literacy efforts aimed at making students more mindful consumers of information and news. Caulfield's acronym "SIFT," which stands for "Stop, Investigate the source, Find better coverage, and Trace the original context," connotes the act of carefully picking through a range of information options to find the best in the bunch. Bulger and Davison (2018) note how at the center of media literacy education is an emphasis on strengthening the interpretive capacities of the individual information consumer; they write that "most trainings focus on individual responsibility, rather than the roles of the community, state, institutions, or developers of technologies" (p. 3). Mihailidis (2019) has also argued persuasively for enhancing the role of the community in media literacy curricula.

According to Fister (2021a), one drawback to fact-checking approaches, aside from their individualist ethos, is that "canned classroom situations don't necessarily transfer to more complex realities"; more often than not, they fail to consider the larger media ecology that surrounds and sustains the problem of "fake news." Phillips and Milner (2021) identify these complex realities as the "deep memetic frames" that have led to network climate change and that have slowly altered the entire ecosystem of the mainstream media forest (p. 19). In exposing students to the "total pattern of knowledge" as it exists in the problematic information they find in academic disciplines, MAC has the potential—like WAC before it—to throw open the windows of learning and "zoom out" to show students how beliefs, opinions, and knowledge are formed through the deep memetic frames that we all hold (Weeks, 1936, p. 283).

In recent years, the claim that one-off instruction in digital literacy, information literacy, or media literacy has failed to move the needle when it comes to problematic information has been amplified to something of a refrain in the scholarly literature on rethinking these efforts (boyd, 2018; Mason and Metzger, 2012; Mihailidis, 2018; Stoddard, 2014). Mason et al. (2018), in their review of approaches to media literacy, suggest that if "fake news is simply treated as an add-on to an existing media

literacy curriculum, teachers will merely create exercises that will help students determine whether a particular story can be considered fake or not" (p. 7). Instead, they suggest that effective media literacy education requires

> understanding the media environment in addition to improving cross-disciplinary collaboration; leveraging the current crisis to consolidate stakeholders; prioritizing approaches and programs with evidence of success; and develop[ing] action-oriented curricula that challenge systemic problems created by media, including social media corporations, in addition to teaching individuals to interpret media messages. (p. 7)

Bulger and Davison (2018) take a similar view, offering five recommendations for the future of media literacy curricula: (a) "develop a coherent understanding of the media environment"; (b) "improve cross-disciplinary collaboration"; (c) "leverage the current media crisis [i.e., the furor over 'fake news'] to consolidate stakeholders"; (d) "prioritize the creation of a national media literacy evidence base"; and (e) "develop curricula for addressing action in addition to interpretation" (p. 12).

These are all excellent and timely recommendations. Like the old composition course of the late nineteenth century, digital media literacy today is mostly treated as an add-on to an existing curriculum—perhaps embedded in an information literacy session given by librarians, or pushed out to a first-year writing classroom in the form of modules or lessons on fact-checking and online source evaluation. And too often such approaches focus all their energies on the student as an individual information consumer, radically disconnected from the larger postdigital media ecologies and online communities that now structure so much of our lives. This is the case in part because it is much easier to point to discrete problems like "fake news" or manipulated media than it is to conceptualize how the roots of the problem might be addressed. Nichols and LeBlanc (2021) point out how challenges like "fake news" present "themselves as discrete problems, amenable to fixed, representational solutions (e.g., lateral reading, ideology critique, or counter-messaging)," when in fact they are "indivisible from the material, technical, and economic concerns that underwrite them" (p. 396).

To be sure, approaches like Caulfield's (2019) SIFT and Wineburg and McGrew's (2017) lateral reading are light-years ahead of more traditional approaches like the old CRAAP model, the familiar checklist approach where students are trained to spot inconsistencies and visual or aesthetic cues that might signal that a source is unreliable (*Is it a .org or .com? When was it published? Is there an author? Does it look like a professional website? And so forth*) (Singer, 2019). But even at their best, approaches that are decontextualized and separated from other curricular (and extracurricular) concerns will feel like add-ons to the more "important" work of the larger curriculum. So,

what we are left with is a familiar sight to WAC and first-year writing profession-als: a patchwork approach of information literacy workshops and library services and interventions in first-year writing classes. Arguably, this is better than nothing (though not everyone agrees [boyd, 2018]).

But here's the rub: if media literacy is everyone's responsibility, then it can easily become no one's responsibility. (Incidentally, and by way of analogy, this may also be why the microwave in the office break room never gets cleaned—the tragedy of the commons means that quite often that which is the responsibility of everyone is the responsibility of no one.) We are at a point in the history of the university where problematic information and information disorder have become enough of a problem in society to warrant their own transdisciplinary approach. The best way to do that, as I detail in the next section, is through the established, 150-plus-year-old mechanism of the academic discipline.

Disciplinary Actions

In 1970, as Walvoord launched the first unofficial WAC program in the United States (Palmquist et al., 2020), the university was in the process of undergoing a radical shift—one that it had not seen the likes of since the late nineteenth century, when large state schools imported the so-called German Model and became research institutions (Connors, 1997; Readings, 1996). The individual academic discipline emerged around the same time, with its specialized codes, conventions, and liturgies, and quickly became the lingua franca of academic professionalization. It remains so to this day. Disciplinarity was the engine that propelled the old classical college of the nineteenth century—an institution built on cultivating oratorical expression and an appreciation for the cultural products of Greek and Roman antiquity—into the technological, bureaucratic, and industrial realities of the twentieth century.

Less taxpayer support and rising costs have meant that universities have had to reinvent themselves in the image of the "the great market god" (Frank, 2001, p. 15). STEM fields and pre-professional degrees have received the bulk of the support over the last five decades, while the humanities were left to fend for themselves in a newly invigorated environment of economic competition that they could never hope to win (Newfield, 2008; Newfield, 2016). But WAC, unlike the venerable Milton, has been fortunate in this new economic and political reality. We have had an "in" in the C-suites of academia. Administrators, by and large, look fondly on WAC efforts because they are seen as practical and "useful" to other disciplines; this utilitarian attitude benefited our work then as it does now. At the core of this support lie two beliefs about writing and disciplinarity, hard won by WAC scholars and teachers: (1) writing cannot be taught in an isolated, one-size-fits-all course, and (2) the academic disciplines are the heartbeat of the modern university.

Disciplines are effective precisely because, as the name suggests, they *discipline* their practitioners into specific approaches to knowledge and pathways for problem-solving. Leitch (2003) puts the matter plainly when he writes that "university professors in North America are disciplinary subjects . . . [and] the university is a disciplinary institution in a disciplinary society" (p. 56). For well over a century, academic disciplines have been the dominant model of knowledge production in the university; as such, they have successfully cordoned off the academic ecosystem into separate niches and specializations. When you get right down to it, disciplines are strategies for organizing knowledge that delimit, demarcate, and assess available knowledge through careful attention to borders and boundaries in a process that Gieryn (1983) calls "boundary-work": the "intellectual ecosystem [is] . . . carved up into 'separate' institutional and professional niches . . . designed to achieve an apparent differentiation of goals, methods, capabilities, and substantive expertise" (p. 783). Proponents of WAC—perhaps because of its relatively late arrival on the academic scene—recognized early on the power of harnessing disciplinary expertise and infrastructure in their mission to expand literacy in written communication across the many porous boundaries of the university. As Russell (2002) writes,

> Disciplines and professions still hold the greatest unrealized potential for developing students' writing across the curriculum. *Faculty in both higher and secondary education see themselves primarily as members of a discipline.* And the fundamental unit of institutional organization is the department. If faculty within a department or, more broadly, a discipline can find intellectually respectable avenues for investigating and discussing writing in relation to pedagogy, then WAC can flourish in ways that are impossible when change comes only through the efforts of individual faculty, however well supported by a central WAC program. (p. 319; emphasis added)

Part of the larger epistemological problem we are seeing today vis-à-vis problematic information and information disorder is that there is no single academic discipline whose sole purview is the damaging spread of lies, propaganda, conspiracy theories, and other misleading or mis-framed media, much (though certainly not all) of it digital. Media studies and communication scholars do much of the heavy lifting in media literacy education (Hobbs, 2020; Mihailidis, 2019), but so do folks in English and rhetoric and composition studies. Educational theorists and even folklorists, anthropologists, philosophers, public health professionals, and data scientists all contribute to the study of a phenomenon that itself goes by a bundle of different names: problematic information (Jack, 2017), information disorder (Wardle and Derakhshan, 2017), network propaganda (Benkler et al., 2018), polluted information

(Phillips and Milner, 2021), manipulated media (Marwick and Lewis, 2017)—and yes, even the venerable "fake news" (note the scare quotes).

There is no single discipline that can encompass and usefully intervene in such a large and complicated problem. It is akin to what Morton (2013) calls a "hyperobject" (pp. 1-24): an entity so enormously vast that it refuses traditional approaches and solutions (e.g., climate change). WAC diffused a particular approach to developing students' literacy and written communication skills across the curriculum—crucially, one that preserved and even enhanced disciplinary boundaries—while recognizing the primacy of disciplinary knowledge as the most effective way to organize the vast knowledge stores of today. Over the last half century, WAC has taken full advantage of an overlapping set of social, political, and institutional transitions both within the university and society to emerge as the transdisciplinary apparatus for knowledge production around questions of literacy and students' complex processes of coming-to-language. The transition we face now is equally momentous.

MAC in Action

During the twentieth century, the growing significance of writing in both university curricula and the changing landscape of US workplaces brought about extensive changes to college curricula. By the 1980s and 1990s, WAC programs had effectively revolutionized the teaching of writing at the college level, shifting it from a secondary or tertiary concern within English departments to a comprehensive university-wide entity complete with its own tenure lines, journals, and professional organizations (McLeod and Miraglia, 2001). Today, we encounter a comparable institutional and curricular turning point vis-à-vis problematic information—a juncture similar to that which WAC encountered half a century ago or even earlier. Similar to WAC in the past, MAC should be introduced in the modern academic sphere as an interdisciplinary approach to revealing and scrutinizing misleading information and deceptive media in all their diverse forms. MAC would assimilate and invigorate a wide range of critical methodologies and literacies under a unified meta- or transdisciplinary umbrella. Melding insights from various fields and formulating evidence-based best practices, it would instruct students in the essential types of critical media literacies—pertaining to messages, incentives, motivations, platforms, interfaces, and systems—that are imperative in the postdigital age. From the era of Plato to the "Big Rhetoric" debates spanning the 1990s and 2000s up to the present, the perennial question of where writing (and rhetoric) fits into the broader realm of knowledge creation has initiated numerous discussions. Referring to information literacy, Fister (2021a) remarks, "It's everywhere, and nowhere." Fister bemoans "the reality that information literacy lacks a specific place in the curriculum"—a sentiment that, until the emergence of WAC, could also apply to discipline-specific writing instruction.

Table 1. Three axes of misinformation studies: communication, motivation, and systems.

Communication	Motivation	Systems
(e.g., representational sense-making, spread and dissemination)	(e.g., algorithmic shapers, power, context)	(e.g., technical-natural practices)
rhetoric	psychology	network science
communication	history	internet studies
writing studies	philosophy	computer science
graphic design	sociology	media literacy
art	anthropology	data science
new media	critical theory	information literacy
marketing	neurobiology	technology studies
English	artificial intelligence (AI)	healthcare
foreign languages	business and economics	non-profits
critical literacy	folklore studies	news literacy

What might an approach such as MAC entail? Table 1 illustrates three axes forming the essential epistemological and methodological foundations of MAC: communication, motivation, and systems. The communication axis—drawing insights from disciplines concerned with symbolic communication in, among, and between humans and nonhuman entities, as well as the construction of representational meaning in signs and symbols—would investigate the creation, molding, dissemination, reception, and impact of messages. With representation and signification as its focal points, this axis emphasizes sight and sense-making, flow and functionality, creation and production, and the dynamics of representation in an era characterized by digital abundance and epistemological overload (Mihailidis, 2018).

Regarding the motivation axis, the longstanding question of motivation in relation to misinformation takes center stage (Marwick, 2018). This axis explores the motivations—both human and algorithmic/AI—that permeate our polluted information environments. It delves into how the algorithms shaping our online content are influenced by human factors and motivations, and how they perpetuate systemic biases based on race and gender (Noble, 2018). Lastly, the systems axis delves into the foundational structures—technical, material, and fleeting—that underpin the post-digital age. It expands the scope of media ecology to encompass not only communicative practices and social contexts but also the natural world, examining how our material systems intersect with (and impinge on) it at every juncture (Bridle, 2018).

Cloud (2018), Zimdars (2020), Phillips (2020), Fister (2021a), Bulger and Davison (2018), Marwick (2018), and other scholars caution against the limitations of existing media literacy endeavors, such as fact-checking and debunking, in combatting misinformation solely with factual information. Phillips (2020) critiques the "fake news" framework for focusing on the truthfulness of the text itself rather than the social processes enabling its dissemination and its alignment with the interests and biases of sharers. Phillips proposes a folkloric framing approach that hinges on the resonance of a claim and its alignment with participants' viewpoints rather than on its veracity. This approach investigates the values, investments, and perspectives inherent in an artifact, shedding light on those connected with it.

Similarly, Zimdars (2020) contends that prevailing "solutions" to "fake news" predominantly address individual reception, despite "fake news" being a multifaceted issue involving information production, distribution, and reception. Zimdars advocates for frame-checking, a concept borrowed from Cloud (2018), which encourages understanding how information is framed and used, as well as the emotions and values it invokes. Unlike fact-checking, which focuses primarily on debunking individual texts, frame-checking broadens the perspective. This is where a transdisciplinary approach like MAC could intervene, revealing how knowledge serves power (*motivation*); how beliefs are shaped and shared culturally, technologically, and cognitively (*systems*); and how these ideas spread across diverse audiences (*communication*). Figure 1 provides an illustration of the systems axis of MAC as applied to the contemporary news-media ecosystem in the United States. It illustrates the complexity and nuance required to understand how mainstream news media has changed in the last quarter century and why focusing solely on the singular artifact of misinformation always misses the bigger picture.

Drawing from the same well of insights as scholars such as Bridle (2018), Bratton (2015), and Nichols and LeBlanc (2021), Fister (2021a) asserts the necessity of incorporating into any comprehensive media or information literacy curriculum "an understanding of information systems: the architectures, infrastructures, and fundamental belief systems that shape our information environment, including the fact that these systems are social, influenced by the biases and assumptions of the humans who create and use them." This imperative applies universally, including within the context of MAC. To this, I would add that an examination of communication and motivation should also be integrated. Such an analysis entails a critical assessment of the frameworks that enable the propagation and potency of problematic information.
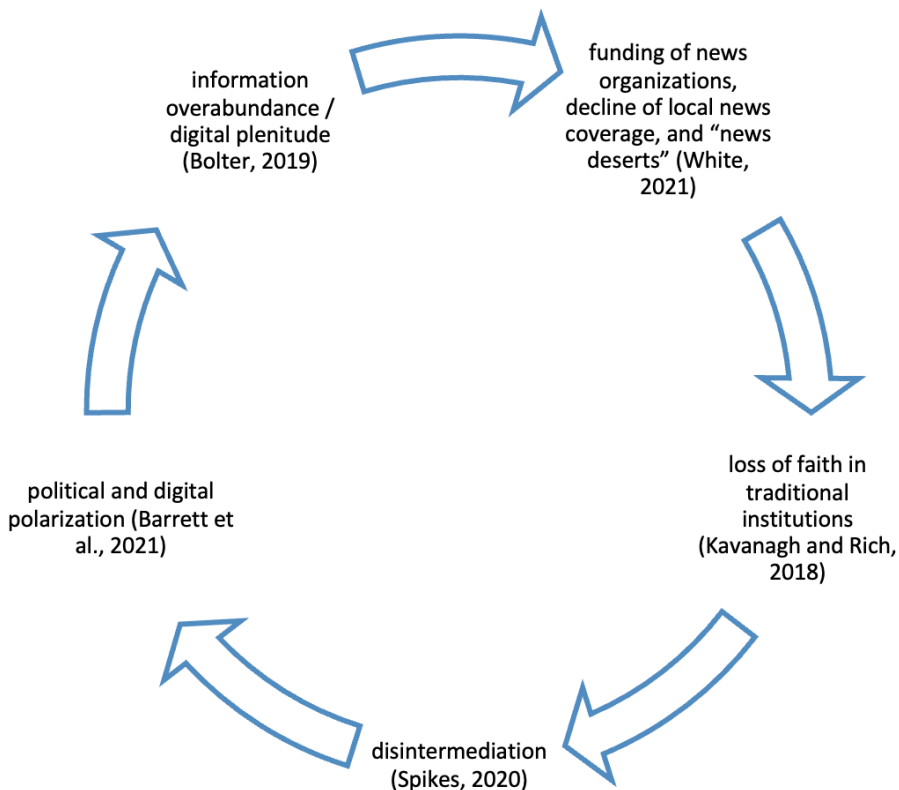
Figure 1. The systems axis of MAC as applied to the contemporary news-media ecosystem in the United States.

Positioning problematic information—as well as the essential literacies required to unearth and analyze it in all its multifaceted manifestations, ranging from text-based misinformation on social platforms to AI-generated deep fakes—at the fore-front of this emerging MAC metadiscipline offers a multitude of strategic advantages beyond an enriched interdisciplinary foundation. First, there is the rather obvious advantage of capitalizing on the contemporary surge in concern over "fake news" and misinformation within the public domain. (Recall the earlier reference to the AP-NORC poll where nearly three in four Americans acknowledge misinformation as a prevailing issue.) Second, akin to the promises (and successes) of WAC, MAC has the potential to harness both the institutional and epistemological authority of academic disciplines while at the same time embracing a diverse array of disciplines under its aegis. Third, MAC can contribute to shifting media and information literacy from primarily a one-off, individual concern to a communal responsibility. By

emphasizing the importance of accurate, reliable information access, MAC can foster strong alliances among individuals and bridge diverse communities to facilitate civic and democratic participation (Mihailidis, 2019).

Fourth, MAC can establish a shared lexicon and conceptual vocabulary for talking about the flow of information and its effects, as well as facilitate intellectual connections between disciplines as varied as health sciences, media studies, and American literature. Indeed, I would go so far as to say that MAC could be the key to authentic cross-disciplinary collaboration. Fifth, MAC's reach need not be confined to higher education; primary- and secondary-school students can similarly benefit from a transdisciplinary methodology, which would mirror the efficacy of WAC pedagogies in areas like writing, critical reading, and literacy skills. As the last fifty years of WAC has persuasively shown, all learners (and faculty) stand to gain from an approach that employs both discipline-specific content and knowledge-generation methodologies. Engaging students in the exploration of how problematic information flows through specific disciplines—whether biology, marketing, medicine, or history—can help students gain a better perspective on what Weeks called "the total pattern of knowledge."

The next fifty years will see massive changes to how we live and work in digital environments. WAC has shown that broad collaboration across disciplinary contexts is not only possible but also preferable. In addition, WAC succeeded in establishing the epistemological assumptions and conceptual language that made possible this radical collaboration across disciplinary silos. Every faculty member wants their students to become more proficient writers. WAC has shown that it is capable of providing students with the writing skills that enable them to succeed in discrete writing tasks, yes; but it has also shifted their style and focus across disciplinary contexts by having them master a basic set of essential rhetorical principles. The ideals and values that have empowered WAC programs for the last fifty years will come in handy as higher education enters its postdigital future.

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