

12-9-2018

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Citation of this paper:

Nicholson, Karen P. "On the Space/Time of Information Literacy, Higher Education, and the Global Knowledge Economy," in "Evidences, Implications, and Critical Interrogations of Neoliberalism in Information Studies," eds. Marika Cifor and Jamie A. Lee. Special issue, *Journal of Critical Library and Information Studies* 2, no.1 (2019).

Article

On the Space/Time of Information Literacy, Higher Education, and the Global Knowledge Economy¹

Karen P. Nicholson

ABSTRACT

Local sites and practices of information work become embroiled in the larger imperatives and logics of the global knowledge economy through social, technological, and spatial networks. Drawing on human geography's central claim that space and time are dialectically produced through social practices, in this essay I use human/critical geography as a framework to situate the processes and practices—the space and time—of information literacy within the broader social, political, and economic environments of the global knowledge economy.

As skills training for the knowledge economy, information literacy lies at the intersection of the spatial and temporal spheres of higher education as the locus of human capital production. Information literacy emerges as a priority for academic librarians in the 1980s in the context of neoliberal reforms to higher education: a necessary skill in the burgeoning “information economy,” it legitimates the role of librarians as teachers.² As a strategic priority, information literacy serves to demonstrate the library's value within the university's globalizing agenda.

¹ With thanks to Maura Seale and the reviewers of this article for their generous and insightful feedback.

² Shirley J. Behrens, “A Conceptual Analysis and Historical Overview of Information Literacy,” *College & Research Libraries* 55, no. 4 (1994): 309–22, https://doi.org/10.5860/crl_55_04_309; Lisa G. O'Connor, *Librarians' Professional Struggles in the Information Age: A Critical Analysis of Information Literacy* (Ph.D. diss., Kent State University, 2006); Emily Drabinski, “Toward a

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While there has been a renewed interest in space/time within the humanities and social sciences since the 1980s, LIS has not taken up this “spatial turn” with the same enthusiasm—or the same degree of criticality—as other social science disciplines.³ This article attempts to address that gap and offers new insights into the ways that the spatial and temporal registers of the global knowledge economy and the neoliberal university produce and regulate the practice of information literacy in the academic library.

Kairos of Library Instruction,” *The Journal of Academic Librarianship* 40, no. 5 (2014): 480–85, doi:10.1016/j.acalib.2014.06.002.

³ Greg Downey, “Human Geography and Information Studies,” *Annual Review of Information Science and Technology* 41, no. 1 (2007): 683–727, doi:10.1002/aris.2007.1440410122.

INTRODUCTION: SPACE, TIME, AND PLACE

Space (and the cognate concept of place) and time are highly interrelated and somewhat contested social constructs.⁴ Once thought to be immutable, space and time are now understood to be co-produced through the sociomaterial:⁵ space is "the material support of time-sharing social practices."⁶ In this way, places are produced and reproduced through spatial and temporal practices. As geographer Tim Cresswell states, places, such as universities, "are never established"; instead, they are reproduced on a daily basis "by people conforming to expectations about what people do at university—visiting the library, taking exams, attending class. Indeed they are performed."⁷

While there has been renewed interest in space/time within the humanities and social sciences since the 1980s, Library and Information Science (LIS) has not taken up this spatial turn with the same enthusiasm—or the same degree of criticality—as other social science disciplines. In response, LIS professor and geographer Greg Downey argues for a human geography approach that would allow us to move beyond conceptions of library as place to an understanding of library as socially produced space.⁸ Such an approach would enable us see "things" such as information objects, actors, and technologies both relationally and dialectically, that is, operating in, on, and through material, social, and technological landscapes and networks.⁹ It would therefore afford new means of conceptualizing changes to the space and time of information production, organization, distribution, and consumption, and examining the ways that ICTs, neoliberal ideology, digital convergence, and transnational corporations (including the university) have created new possibilities for the global expansion of capital.¹⁰ Downey elaborates: "Libraries are not just *places* in the sense of cultural, social, and communal sites, but also serve as *spaces* of important but fragmented social action, connected to endless digital realms and diverse representational schemes."¹¹

⁴ David Harvey, *Justice, Nature and the Geography of Difference* (Cambridge, MA: Blackwell Publishers, 1996); Tim Cresswell, *Place: A Short Introduction* (Malden, MA: Blackwell Publishers, 2004).

⁵ David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Malden, MA: Blackwell Publishers, 1989).

⁶ Manuel Castells, *The Rise of the Network Society, Vol. 1 of the Information Age: Economy, Society and Culture* (Malden, MA: Blackwell Publishers, 1996), 411.

⁷ Greg Downey, "Human Geography and Information Studies," *Annual Review of Information Science and Technology* 41, no. 1 (2007): 686, doi:10.1002/aris.2007.1440410122.

⁸ *Ibid.*, 686.

⁹ *Ibid.*, 684-5.

¹⁰ *Ibid.*

¹¹ *Ibid.*, 721, original emphasis.

Through social, technological, and spatial networks, what sociologist Manuel Castells refers to as “the space of flows,”¹² local sites and practices of information work become embroiled in the larger imperatives and logics of the global knowledge economy. Identifying the pathways and junctions between such sites and practices helps us to better understand this process.¹³ As skills training for the knowledge economy, information literacy lies at the intersection of the spatial and temporal spheres of higher education as the locus of human capital production. In their analysis of discourses of internationalization in two universities’ strategic plans, feminist geographers Matus and Talburt note that the student as future worker “is spatialized as needing new skills and knowledges in order to meet the changing environment ‘out there,’” an abstract, global space “dangerously inclined to neutrality, technical knowledge, and instrumental rationalities.”¹⁴ It is in the context of neoliberal reforms to higher education in the 1980s that information literacy emerges as a priority for academic librarians: information literacy, a necessary skill in the burgeoning “information economy,” legitimates their role as teachers.¹⁵ An arguably marginal curricular practice, information literacy nonetheless serves as an attempt by the library to demonstrate its value within the university’s globalizing agenda—namely, to produce world-class research and prepare students to be global citizens and workers (while simultaneously building connections within the community and addressing local issues).¹⁶ “Information literacy is...a matter of fiscal and professional survival”¹⁷; as many librarians are fond of saying, information literacy affords us “a place at the table.” As Oakleaf writes in the *Value of Academic Libraries Report*, a key professional document that regulates libraries’ efforts to demonstrate value and return on investment,

¹² Castells, *The Rise of the Network Society*.

¹³ Downey, “Human Geography and Information Studies,” 721.

¹⁴ Claudia Matus and Susan Talburt, “Spatial Imaginaries: Universities, Internationalization, and Feminist Geographies,” *Discourse: Studies in the Cultural Politics of Education* 30, no. 4 (December 2009): 521, <https://doi.org/10.1080/01596300903237271>.

¹⁵ Shirley J. Behrens, “A Conceptual Analysis and Historical Overview of Information Literacy,” *College & Research Libraries* 55, no. 4 (1994): 309–22, https://doi.org/10.5860/crl_55_04_309; Lisa G. O’Connor, *Librarians’ Professional Struggles in the Information Age: A Critical Analysis of Information Literacy* (Ph.D. diss., Kent State University, 2006); Emily Drabinski, “Toward a Kairos of Library Instruction,” *The Journal of Academic Librarianship* 40, no. 5 (2014): 480–85, doi:10.1016/j.acalib.2014.06.002.

¹⁶ These tropes are commonplace in universities’ statements on internationalization. See Matus and Talburt, “Spatial Imaginaries.”

¹⁷ Karen P. Nicholson, “‘Taking Back’ Information Literacy: Time and the One-Shot in the Neoliberal University,” in *Critical Library Pedagogy Handbook. Volume 1, Essays and Workbook Activities*, eds. Kelly McElroy and Nicole Pagowsky (Chicago: Association of College & Research Libraries, 2016), 32, <https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1045&context=fimspub>.

“although it may be difficult to make direct and clear connections between academic libraries and students’ educational and professional futures, these outcomes are of critical importance to institutions and their stakeholders.”¹⁸ Consequently, Oakleaf argues, when these connections do not exist, it is up to librarians to devise them.¹⁹

In earlier work, I argued that using time as a lens allows us to uncover the pernicious issue at the heart of information literacy—namely, “information literacy is a construct developed for and taught within the broader context of the neoliberal university, which embraces a skills agenda.”²⁰ I further suggested that if librarians have struggled to move beyond the dominant one-shot information literacy guest lecture model, with its “superficial, skills-oriented approach,” it is because “the one-shot is in perfect sync with the accelerated, fragmented ‘corporate time’...of contemporary higher education.”²¹ In this article, I extend that analysis to consider the spatial/temporal registers of information literacy as skills training for the global knowledge economy and a strategic priority intended to secure a role for the library within the university’s internationalization agenda.

THE SPACE/TIME OF HIGHER EDUCATION IN THE GLOBAL KNOWLEDGE ECONOMY

Speed, Space/Time, and Power

The university as institution has been “constantly reshaped by the transformation of the global, national and social contexts in which [it] operates.”²² The spatial and temporal registers and practices of the university have been impacted by larger shifts ushered in by the global expansion of capital. In the 1970s, Fordist modes of production were replaced by “flexible accumulation,” which uses real time ICTs, flexible workers, and automation to coordinate just-in-time inventories.²³ Mainstream discourses of “speed

¹⁸ Association of College & Research Libraries and Megan Oakleaf, *Value of Academic Libraries: A Comprehensive Research Review and Report* (Chicago, IL: Association of College & Research Libraries, 2010), 14.

¹⁹ *Ibid.*, 14.

²⁰ Nicholson, “‘Taking Back’ Information Literacy,” 26.

²¹ *Ibid.*, 27.

²² Carlos Alberto Torres, “Public Universities and the Neoliberal Common Sense: Seven Iconoclastic Theses,” *International Studies in Sociology of Education* 21, no. 3 (2011): 178, doi:10.1080/09620214.2011.616340.

²³ Harvey, *The Condition of Postmodernity*.

theory”²⁴ posit that this shift accelerates and intensifies time: through the use of networked information and communication technologies, the non-stop “timeless time” of the global knowledge economy²⁵ becomes layered onto the rational, metered time of the industrial age. Space is compressed as the time needed to connect distant locations is reduced. Through the use of geolocation technologies, such as global positioning systems, geographical information systems, and radio-frequency identifier tags, space and time become increasingly “hyper-coordinated,” with the result that “we will live in a world of perpetual contact, in which it will be possible to track and trace most objects and activities on a continuous basis, constantly adjusting time and space in real time.”²⁶

Inspired by feminist geographer Doreen Massey’s theory of “power-geometry,”²⁷ Media Studies scholar Sarah Sharma introduces the concept of power-chronography, “a conception of time as lived experience, always political, produced at the intersection of a range of social differences and institutions, and of which the clock is only one chronometer,”²⁸ as a means of challenging normative speed theories. Sharma argues that while close attention has been paid to the ways that “space is imbricated in games of power—whether by extension, expansion, colonization, imprisonment, banishment, confinement, inclusion, or exclusion,” the importance of time as “a site of material struggle and social difference”²⁹ has been neglected. Theories of acceleration are based in a spatial understanding of time that fails to adequately account for power. Speed is not a ubiquitous phenomenon—not everyone is equally “out of time.” Instead, relationships to time are highly differentiated. In the heteronormative, patriarchal order of global capital, temporal worth and labour are gendered, raced, and classed. At the same time, they are co-produced: our individual, embodied experience of time—our temporality—and the meanings and values attributed to it are entangled with, and dependent upon, the temporality of others. “Keeping people in and out of time is a form of social control,”³⁰ one upon which global capital depends. And because temporality is not determined by technological speed but by where one “fits” within this order, some people’s temporal experiences are

²⁴ Sarah Sharma, *In the Meantime: Temporality and Cultural Politics* (Raleigh-Durham, NC: Duke University Press), 5.

²⁵ Castells, *The Rise of the Network Society*.

²⁶ Nigel Thrift, “Space: The Fundamental Stuff of Geography,” in *Key Concepts in Geography*, eds. Gill Valentine, Sarah L. Holloway, and Stephen P. Rice (London: SAGE, 2003), 97.

²⁷ Doreen Massey, “Imagining Globalization: Power-Geometries of Time-Space,” in *Global Futures: Migration, Environment and Globalization*, eds. Avtar Brah, Mary J Hickman, and Máirtín Mac an Ghail (London: Palgrave Macmillan UK, 1999), 27-44, doi:10.1057/9780230378537_2.

²⁸ Sharma, *In the Meantime*, 28.

²⁹ *Ibid.*, 9.

³⁰ *Ibid.*, 25.

normalized whereas others' are "recalibrated." Being "in time" requires temporal strategies and technologies of the self "contrived for synchronizing to the time of others" ³¹ within a complex and pervasive "temporal architecture of time maintenance."³²

The Space/Time of the Neoliberal University

The socio-economic, technological, and spatio-temporal changes of the post-Fordist economy are accompanied by neoliberal policy reforms that significantly alter the purpose and role of higher education in the West. The university has always had multiple functions within society: to educate citizens, to produce skilled workers, to create and instill a common national culture, to contribute to the advancement of knowledge. The relative importance of these functions has varied according to time and place, however. From the 1970s to the 1990s, the rise of the knowledge economy provided the impetus for key educational reforms intended to enhance the economic competitiveness of the nation-state by linking postsecondary education to business innovation.³³ Since the 1980s, competitive logics advanced by the likes of the OECD, UNESCO, and the World Bank have "give[n] direction, form, content and disciplinary power to neo-liberalism as a political and hegemonic project... mediated through higher education."³⁴ Today, a key function of the university is to produce human capital for the state; education is primarily seen as investing in oneself for future economic gains. As feminist scholar Catherine Rottenberg reminds us, the rationality of "neoliberalism...moves to and from the management of the state to the inner workings

³¹ Ibid., 8.

³² Ibid., 139.

³³ Mark Olssen and Michael A. Peters, "Neoliberalism, Higher Education and the Knowledge Economy: From the Free Market to Knowledge Capitalism," *Journal of Education Policy* 20, no. 3 (2005): 313–45, doi:10.1080/02680930500108718; Sheila Slaughter and Larry Leslie, *Academic Capitalism: Politics, Policies, and the Entrepreneurial University* (Baltimore, MD: Johns Hopkins University Press, 1997). According to Olssen and Peters, the terms "knowledge capitalism" and "knowledge economy" became commonplace in public policy through a series of widely circulated reports published in the late 1990s by the OECD and the World Bank in which "education is reconfigured as a massively undervalued form of knowledge capital that will determine the future of work, the organization of knowledge institutions and the shape of society in the years to come." Olssen and Peters, "Neoliberalism, Higher Education and the Knowledge Economy," 331.

³⁴ Susan Robertson, "Challenges Facing Universities in a Globalising World," in *International Seminar on Quality in Higher Education: Indicators and Challenges*. Porto Alegre, Brazil, 2010, 5, accessed April 29, 2018, <http://susanleerobertson.files.wordpress.com/2012/07/2010-robertson-challenges.pdf>.

of the subject, normatively constructing and interpellating individuals as entrepreneurial actors.”³⁵

Just as neoliberalism has become a “common-sense”³⁶ ideology in the private and public spheres, “‘globalisation’ mobilises seemingly self-evident imaginaries of space and time that function as rationalities, or ways of framing problems.”³⁷ The “actions, responses, and solutions” dictated by these imaginaries further naturalize “‘space’ and our ‘place’ within it.”³⁸ Documents produced by national and supranational organizations “construct globalisation as a new spatiality that necessitates competition and innovation as a responsibility” for nations, universities, and students.³⁹ Matus and Talburt cite the following passage from the AAC&U’s *College Learning for the New Global Century* in order to highlight the ways in which liberal education in the United States has been significantly redefined and realigned to serve economic priorities:

The council believes that higher education can and should play a crucial role in fulfilling America’s promise in this new global century: tapping potential, creating opportunity, fueling an innovative economy, reducing inequities, solving problems, and inspiring citizens to create a more just, humane, and sustainable world.⁴⁰

As a result, in response to “the seeming imperatives of economic globalization,”⁴¹ higher education has embraced an agenda of internationalization.⁴² Paradoxically, however,

³⁵ Catherine Rottenberg, “The Rise of Neoliberal Feminism,” *Cultural Studies* 28, no. 3 (2014): 422, doi:10.1080/09502386.2013.857361.

³⁶ Stuart Hall and Alan O’Shea, “Common-Sense Neoliberalism,” *Soundings: A Journal of Politics and Culture* 55, no. 1 (2013): 8–24, <https://muse.jhu.edu/article/531183>. While neoliberalism may be pervasive, it does not represent one distinct political philosophy but rather an array of political theories and political economic practices. Dag Einar Thorsen and Amund Lie (n.d.), *What is Neo-Liberalism?* <http://folk.uio.no/daget/neoliberalism.pdf>; David Harvey, *A Brief History of Neoliberalism* (New York: Oxford University Press, 2007).

³⁷ Claudia Matus and Susan Talburt, “Producing Global Citizens for the Future: Space, Discourse and Curricular Reform,” *Compare* 45, no. 2 (2015): 225, doi:10.1080/03057925.2013.842682.

³⁸ Matus and Talburt, “Producing Global Citizens for the Future,” 225. Theories of globalization are complex and beyond the scope of this paper. For an overview, see Jason L. Powell, “Globalization and Modernity,” *International Letters of Social and Humanistic Sciences* 28 (2014): 1–60, <https://www.scipress.com/ILSHS.28.1.pdf>.

³⁹ Matus and Talburt, “Producing Global Citizens for the Future,” 233.

⁴⁰ Association of American Colleges & Universities (AAC&U), “College and Learning for the New Global Century,” 25, quoted in Matus and Talburt, “Producing Global Citizens for the Future,” 235-6.

⁴¹ Claudia Matus and Susan Talburt, “Spatial Imaginaries,” 515. Sassen notes that there are multiple globalizations, of which neoliberal corporate globalization is but one form. Saskia

although the university has been repurposed into an engine of economic development for the nation-state, it increasingly positions itself as a transnational corporation,⁴³ a competitive actor in the global knowledge economy in its own right. Geographer Kris Olds refers to this as the “denationalization” of higher education, a “process whereby developmental logics, frames, and practices are increasingly associated with what is happening beyond” the borders of the nation-state, even as these logics, frames, and practices continue to be seen as “national.”⁴⁴ In order to comprehend the role and purpose of the contemporary university, attention must therefore be paid to interactions between local, national, and global.⁴⁵

The university’s response to globalization is operationalized through the policies and practices of internationalization and curricular reform, both of which reconstitute the space/time of higher education on multiple levels.⁴⁶ Interdisciplinary schools and research centers are created through directive state funding and public-private partnerships. The focus on outcomes-based education and skills changes the nature of what is taught and how; it also regulates knowledge and subjects.⁴⁷ The power and allure of skills lies in their flexibility: skills can be “strategically deployed to mean different things, depending on who uses them, for what audience, in what contexts, and

Sassen, “Globalization or Denationalization?” *Review of International Political Economy* 10, no. 1 (2003): 2, <http://www.saskiasassen.com/PDFs/publications/Globalization-or-Denationalization.pdf>.

⁴² Internationalization is defined as “the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institution.” Hans de Wit, Jane Knight, and the Organisation for Economic Co-operation and Development, *Quality and Internationalisation in Higher Education* (Paris: Organisation for Economic Co-operation and Development, 1999), 16. It is intended to increase “mobility of people, exchange of ideas, and convergence of institutional policies and practices.” Matus and Talburt, “Spatial Imaginaries,” 516.

⁴³ Bill Readings, *The University in Ruins* (Cambridge, MA: Harvard University Press, 1997).

⁴⁴ Kris Olds, “Are We Witnessing Denationalization of the Higher Education Media?” *Global Higher Ed: Surveying the Construction of Global Knowledge/Spaces for the “Knowledge Economy,”* *Inside Higher Ed*, July 15, 2010, accessed April 29, 2018, https://www.insidehighered.com/blogs/globalhighered/are_we_witnessing_denationalization_of_the_higher_education_media.

⁴⁵ Simon Marginson and Gary Rhoades, “Beyond National States, Markets, and Systems of Higher Education: A Glonacal Agency Heuristic,” *Higher Education* 43, no. 3 (2002): 281–309.

⁴⁶ Matus and Talburt, “Producing Global Citizens for the Future”; Matus and Talburt, “Spatial Imaginaries”; Robertson, “Challenges Facing Universities in a Globalising World.”

⁴⁷ Matus and Talburt, “Spatial Imaginaries,” 519.

to what ends.”⁴⁸ As a result, despite the lack of clarity that surrounds skills (including information literacy) in the higher education curriculum,⁴⁹ they are nonetheless “assumed to be commensurable and readily available for inculcation into future workers.”⁵⁰ Curricula become more modular to facilitate pathways and student mobility and online learning is increasingly used as means to cut costs and circumvent the time and space constraints of curriculum, calendar, timetable, and campus that result from widened access to higher education without associated increases in physical space or staffing.⁵¹ The university secures its reputation as “world class” by recruiting the best and brightest staff and students from around the globe, and creating exchange programs, “offshore” satellite campuses, and showcase facilities.⁵² The logics of rankings and international benchmarking strategies and instruments situate universities—and nations—on an inevitable continuum of development, giving rise to spatial and temporal binaries such as developed/underdeveloped, superior/inferior, center/periphery.⁵³ Matus and Talburt note that feminist geographers reject this spatial/temporal dualism. For example, Massey contends places are not “bounded” but rather the product of an “open and porous networks of social relations.”⁵⁴ Likewise, space is neither abstract stasis nor merely an outcome; it is continually made and remade through pathways, connections, and interactions “at all spatial scales, from the most local level to the most global.”⁵⁵ Mainstream higher education discourse portrays globalization as a nebulous, chaotic imperative to which universities must respond, yet universities are in fact active participants in producing and reproducing the global on a

⁴⁸ Bonnie Urciuoli, “Skills and Selves in the New Workplace,” *American Ethnologist* 35, no. 2 (2008): 211, doi:10.1111/j.1548-1425.2008.00031.x.

⁴⁹ See for example, Elisabeth Dunne, Neville Bennett, and Clive Carré, “Higher Education: Core Skills in a Learning Society,” *Journal of Education Policy* 12, no. 6 (1997): 511–25, doi:10.1080/0268093970120606, and Simon C. Barrie, “Understanding What We Mean by the Generic Attributes of Graduates,” *Higher Education* 51, no. 2 (2006): 215–41, doi:10.1007/s10734-004-6384-7.

⁵⁰ Urciuoli, “Skills and Selves,” 222.

⁵¹ Matus and Talburt, “Spatial Imaginaries”; Dorothy Moss, *Gender, Space and Time: Women and Higher Education* (Lanham, MD: Lexington Books, 2006).

⁵² Susan Robertson, “World-Class Higher Education (for Whom?),” *Prospects* 42, no. 3 (2012): 239, <https://doi.org/10.1007/s11125-012-9236-8>.

⁵³ Matus and Talburt, “Producing Global Citizens for the Future”; Robertson, “Challenges Facing Universities in a Globalising World.”

⁵⁴ Doreen Massey, *Space, Place, and Gender* (Minneapolis: University of Minnesota Press, 1994), 121, quoted in Matus and Talburt, “Producing Global Citizens for the Future,” 518.

⁵⁵ Doreen B. Massey, “Don’t Let’s Counterpose Place and Space,” *Development* 45, no. 1 (March 2002): 24, doi:10.1057/palgrave.development.1110312; Doreen Massey, “Politics and Space/Time,” *New Left Review*, no. 196 (1992).

local scale; they are directed to “respond to change by creating more of the change they are responding to.”⁵⁶

With regard to time, Walker contends that because it intersects with the three existing dimensions of globalization—space, movement, and place—it can be considered as a fourth dimension.⁵⁷ Introducing a temporal focus into studies of “academic capitalism”⁵⁸ therefore affords a better understanding of globalization’s impact on the university’s timescape.⁵⁹ The values and practices of New Public Management, which seek to increase efficiency and accountability in the public sector, have altered the time of teaching, learning, and research in the university.⁶⁰ The timescape of the neoliberal university is marked by the requirement to do more work, and a greater variety of work, in less time; the pervasive scheduling and lengthening of the work day; the blurring of work and personal time; and the need to divide one’s attention, and time, between multiple tasks at once. In this accelerated and intensified temporal order, there is little time for “slow” scholarship such as critical thinking, reflection, dialogue, or writing.⁶¹ At the same time, however, Walker draws our

⁵⁶ Matus and Talburt, “Spatial Imaginaries,” 236, original emphasis.

⁵⁷ Judith Walker, “Time as the Fourth Dimension in the Globalization of Higher Education,” *Journal of Higher Education* 80, no. 5 (2009): 483–509, doi:10.1353/jhe.0.0061; Matus and Talburt, “Spatial Imaginaries.”

⁵⁸ Academic capitalism, a term coined by Slaughter and Leslie, describes efforts by institutions of higher education to produce, market, and sell research outputs and educational services in the knowledge economy. Slaughter and Leslie, *Academic Capitalism*.

⁵⁹ Barbara Adam introduces the concept of timescape to underscore the interrelatedness of time, spatiality, and matter and the importance of context in our experience of time. Barbara Adam, *Timescapes of Modernity: The Environment and Invisible Hazards* (London: Routledge, 1998).

⁶⁰ Peter Bansel and Bronwyn Davies, “The Time of Their Lives? Academic Workers in Neoliberal Time(s),” *Health Sociology Review* 14, no. 1 (March 11, 2005): 47–58; Henry A. Giroux and Susan Searls Giroux, *Take Back Higher Education: Race, Youth, and the Crisis of Democracy in the Post-Civil Rights Era* (New York, NY: Palgrave, 2004); Robert Hassan, *The Chronoscopic Society: Globalization, Time and Knowledge in the Network Economy. Digital Formations* (New York: Peter Lang, 2003); Robert Hassan, *The Information Society* (Malden, MA: Polity, 2008); Heather Menzies and Janice Newson, “No Time to Think: Academics’ Life in the Globally Wired University,” *Time & Society* 16, no. 1 (2007): 83–98, doi:10.1177/0961463X07074103; Walker, “Time as the Fourth Dimension”; Oili-Helena Ylijoki and Hans Mäntylä, “Conflicting Time Perspectives in Academic Work,” *Time & Society* 12, no. 1 (2003): 55–78, doi:10.1177/0961463X03012001364. Matus and Talburt (“Spatial Imaginaries”) also emphasize the importance of New Public Management in facilitating the university’s internationalization agenda.

⁶¹ Alison Mountz, Anne Bonds, Becky Mansfield, Jenna Lloyd, Jennifer Hyndman, Margaret Walton-Roberts, Ranu Basu, et al., “For Slow Scholarship: A Feminist Politics of Resistance through Collective Action in the Neoliberal University,” *ACME International E-Journal for*

attention to the multiple and divergent temporal orders that co-exist within the academy: “while academic capitalism and globalization intersect and shape higher education institutions, pre-modern time, clock-time, and global time are all present and interact with each other in conflicting and disharmonious ways.”⁶² The university continues to cling to its image as a humanist institution while at the same time acting as a global business. Feminist and anticolonialist scholars remind us of the differentiated temporal impacts of New Public Management on white women and people of color.⁶³ In a related vein, in the continued presence of institutional discourses of “universalizing, humanist knowledges” juxtaposed with statements about equipping students with the skills they will need as workers in a fast-changing world, Matus and Talburt perceive a loss of “spatial coherence,” “tenuous contact between humanism and managerialism rather than relational change and negotiation.”⁶⁴ The result is a complex scenario in which the university disavows its role in the production of the very global space it describes.⁶⁵ In my view, with its complex and contradictory spatial/temporal registers and practices, the global, corporatized university is best characterized by Sharma’s concept of “transit spaces.”⁶⁶

Transit spaces are the concrete edifices of mediation and mobility, the material spaces where capital, people, goods, and information circulate. While transit spaces act as the switch points for global capital, they also house very specific local relations. They are key sites for the governing and institutionalizing of the

Critical Geographies 14, no. 4 (2015): 1235–59, <https://www.acme-journal.org/index.php/acme/article/view/1058>. Sharma argues that the “slow” movement is, in fact, a spatial practice, not a temporal one. See Sharma, *In the Meantime*. Also see Matus and Talburt, “Spatial Imaginaries,” 520.

⁶² Walker, “Time as the Fourth Dimension,” 505.

⁶³ See for example, Elizabeth Grosz, *Time Travels* (Durham, NC: Duke University Press, 2005); Dorothy Moss, *Gender, Space and Time*; Alison Mountz, Anne Bonds, Becky Mansfield, et al., “For Slow Scholarship”; Lisa Sloniowski, “Affective Labor, Resistance, and the Academic Librarian,” *Library Trends* 64, no. 4 (2016): 645–66, <https://doi.org/10.1353/lib.2016.0013>. Shahjahan provides a useful overview of anticolonial and indigenous scholars’ work related to time and colonialism. Riyad A. Shahjahan, “Being ‘Lazy’ and Slowing down: Toward Decolonizing Time, Our Body, and Pedagogy,” *Educational Philosophy and Theory* 47, no. 5 (2015): 488–501, <https://doi.org/10.1080/00131857.2014.880645>.

⁶⁴ Matus and Talburt, “Producing Global Citizens for the Future,” 520.

⁶⁵ *Ibid.*, 520.

⁶⁶ Sharma, *In the Meantime*.

temporal order. They are also replete with the contradictions of that order's contents, the multiple temporalities or itineraries, as they intersect and cross.⁶⁷

THE SPACE/TIME OF THE NEOLIBERAL ACADEMIC LIBRARY

Today, the value of the academic library depends “on the visibility it affords to the university, technological innovation, and its educational mission.”⁶⁸ By positioning itself as an innovative, student-centered institution, the library creates a new corporate identity or brand for itself, one strategically aligned with its parent institution; the library, like the university, “is in the business of teaching.”⁶⁹ As a result, academic libraries have also become embroiled in the spatial and temporal logics of the global knowledge economy, to some degree at least. The design and aesthetic management of library spaces have been used to reinforce the university's identity as a site for the production of knowledge workers, as evidenced by Hancock and Spicer's case study of New Glasgow Caledonian University's Saltire Centre library building.

It is a building which is designed to engender individuals who are “more active, more creative,” and more capable of self-regulation. By acting on the bodies and perceptions of students, the intent is to configure self-regulating, collaborative and team-focused subjects – the perceived characteristics of knowledge workers in the 21st century economy. Such a building appears highly congruent with the mission and aspirations of an institution which professes a particular function in relation to the economic development of its host nation; namely to produce a collaboratively orientated, ICT skilled labour force suited to employment in an increasingly service oriented, globally competitive national economy.⁷⁰

Mirza and Seale argue that redesigned technology-infused spaces in libraries, such as makerspaces, not only promote “the development of quantitative and digital skills, but

⁶⁷ Ibid., 147-48.

⁶⁸ Catherine Closet-Crane, “A Critical Analysis of the Discourse on Academic Libraries as Learning Places,” *Advances in Library Administration and Organization*, 30 (2011): 36-37, [https://doi.org/10.1108/S0732-0671\(2011\)0000030004](https://doi.org/10.1108/S0732-0671(2011)0000030004).

⁶⁹ Ibid., 36.

⁷⁰ Philip Hancock and André Spicer, “Academic Architecture and the Constitution of the New Model Worker,” *Culture and Organization* 17, no. 2 (2011): 11, <http://openaccess.city.ac.uk/15600/>.

also entrepreneurship and innovation.”⁷¹ In normative visions of the library of the future collated and endorsed by the American Library Association on its *Trend Library* website, the student is depicted as entrepreneurial, male, and white,⁷² the normative knowledge worker. Moreover, the present, consistently depicted in terms of disruption and progress, “fraught with “monumental and inevitable” changes,⁷³ represents a kind of universalizing future-present⁷⁴ to which libraries must respond in a never-ending (and arguably misguided) attempt to demonstrate their continued relevance, to show themselves to be innovative, collaborative, resilient. As Drabinski notes in her examination of the timescape of professional identity, “for librarianship, the present is always exceptional and always requires exceptional attention to take action for the coming future.”⁷⁵

Dempsey, Malpas, and Lavoie contend that by facilitating “the emergence of cooperative infrastructure” and cloud-based “group-scaled solutions,” the “network context” has had profound implications for collection development, scholarly communication, and user engagement in academic libraries.⁷⁶ Local collections, cloud-based storage, and discovery systems are now managed at local, consortial, and national levels. Discovery of and access to resources have been decoupled as the library’s local catalog or discovery layer points users to web-based research tools, such as Google Scholar, and includes records for resources not available locally, such as open access journals. In this way, the networked environment connects the academic library to the space of flows. We need remain cognizant of the fact that access is contingent upon institutional affiliation, however; information is, after all, a commodity. Despite the allure of the rhetoric of globalization with its emphasis on porosity and flows, in the age of the refugee crisis, Brexit, travel restrictions, and border walls, it is clear that boundaries such as borders still very much matter in the global economy.⁷⁷

⁷¹ Rafia Mirza and Maura Seale, “Who Killed the World? White Masculinity and the Technocratic Library of the Future,” in *Topographies of Whiteness: Mapping Whiteness in Library and Information Science*, ed. Gina Schlesselman-Tarango (Sacramento, CA: Library Juice Press, 2017), 177-8.

⁷² *Ibid.*, 178.

⁷³ *Ibid.*, 175.

⁷⁴ Sue Clegg, “Time Future - the Dominant Discourse of Higher Education,” *Time & Society* 19, no. 3 (2010): 345–64, doi:10.1177/0961463X10381528.

⁷⁵ Emily Drabinski, “Becoming Librarians, Becoming Teachers: *Kairos* and Professional Identity,” *Canadian Journal of Information and Library Science* 40, no. 1 (2016): 28, muse.jhu.edu/article/611575.

⁷⁶ Lorcan Dempsey, Constance Malpas, and Brian Lavoie, “Collection Directions: The Evolution of Library Collections and Collecting,” *portal: Libraries and the Academy* 14, no. 3 (2014): 394, <https://doi.org/10.1353/pla.2014.0013>.

⁷⁷ With thanks to Maura Seale for underscoring this important consideration.

The academic library is also subject to the accelerated, intensified, and differentiated timescape of the knowledge economy. Although the LIS literature does not address this issue directly, it would appear that academic libraries began to exploit just-in-time inventory approaches in the early 1990s, taking advantage of the affordances of the Web for resource discovery and delivery in order to cope with the spiraling cost of serials and become more efficient.⁷⁸ This innovation ushers in what Widdicombe describes as “the 24/7 library trend.”⁷⁹ Today, in addition to more traditional strategies, such as approval plans, standing orders, subscriptions, and firm orders, academic libraries also use patron-driven or demand-driven acquisitions, another form of just-in-time inventory management. The just-in-time model, featuring accelerated service delivery, has become a common approach to library public services as well. “Libraries provide ‘just in time’ opportunities for online and distance learning through the use of pathfinders, guides, and tutorials,” and support for information literacy and other “skills” is “increasingly pared down into bite-sized, easy-to-digest content chunks.”⁸⁰ Most North American academic research libraries now use a just-in-time triage model to provide reference service, whereby directional and factual questions are answered by library technicians (and sometimes student staff), with more involved questions referred to an “on call” librarian as needed. Chat reference, a kind of “call center” approach to reference service,⁸¹ offered across branches, regions, countries, and time zones, increases the accessibility of library services and resources for remote users.

In normative LIS discourse, the 24/7 library is lauded for being “in time” with the hyper-accelerated real time environment of the global knowledge economy:

We have entered the Google world and there is no turning back. People come to expect instant responses, immediate delivery, and satisfactory closure to their quest. ...Instant satisfaction is the mantra. Using the highest speed network available, students search databases for clues to the answer, and download documents or read relevant paragraphs in online books. They then cobble this together for whatever purpose is required and move on to the next task. And,

⁷⁸ This conclusion is based on examining the results from a search for (“just in time” OR time) in the *Library, Information Science & Technology Abstracts* (LISTA) and *Library Literature and Information Science Full Text* databases.

⁷⁹ Richard P. Widdicombe, “Evolution of a Revolution,” *Science & Technology Libraries* 24, no. 1–2 (2004): 191, doi:10.1300/J122v24n01_12.

⁸⁰ Nicholson, “McDonaldization,” 331.

⁸¹ Steve Coffman and Matthew L. Saxton, “Staffing the Reference Desk in the Largely-Digital Library,” *Reference Librarian* 66 (1999): 141–63.

what of top researchers dealing with complex issues? The process is still very much the same...⁸²

As Sharma's theory of power-chronography makes clear, however, discourses of acceleration mask the differentiated temporal labor upon which the knowledge economy depends: "Part of capital's transformative effect is maintaining a fiction of generalized effects. Being aware of temporality disrupts the tendency to generalize the conditions and effects of capital's transformations."⁸³ In this case, narratives of the high-speed virtual library, with its seamless interfaces, instant access, and "frictionless" interactions, obscure the temporal labor of library workers. For example, the chat operator's work and time are disrupted while they sit and wait for "clients."⁸⁴ Inefficient waiting is followed by periods of intense activity as the operator synchronizes their rhythms to those of their interlocutor. To wait—to recalibrate—is to be subject to time as power. In keeping with this idea, in their examination of librarians' experiences of time while providing reference service, Bossaller, Burns, and VanScoy note that because wait times are used as an indicator of service quality, time serves as a form of professional self-regulation and discipline.⁸⁵

Following the model of sociologist George Ritzer,⁸⁶ Quinn and Nicholson consider the growing influence of New Public Management in academic libraries to be a form of "McDonaldization," a process of rationalization characterized by efficiency, predictability, calculability, and control.⁸⁷ In their attempts to provide simplistic, universalizing solutions to the complex, messy, and inefficient process of learning, just-in-time pedagogical approaches embody technocratic solutionism. Mirza and Seale argue that "tutorials, library guides, badges, FAQs, flipped learning, connected learning, and gamification...reinscribe neoliberal ideology through their unquestioning ideas such as short-term results, the demands of the market, just-in-time services, return-on-investment (ROI), and efficiency."⁸⁸ Through a calculated and predictable set of approaches and strategies such as developing "innovative" technology-rich library spaces and services for niche populations, marketed in glossy brochure-like annual

⁸² Widdicombe, "Evolution of a Revolution," 194.

⁸³ Sharma, *In the Meantime*, 72.

⁸⁴ With thanks to the reviewer who drew my attention to this example.

⁸⁵ Jenny Bossaller, Christopher Sean Burns, and Amy VanScoy, "Re-Conceiving Time in Reference and Information Services Work: A Qualitative Secondary Analysis," *Journal of Documentation* 73, no. 1 (January 2017): 2-17.

⁸⁶ George Ritzer, *The McDonaldization of Society: An Investigation into the Changing Character of Contemporary Social Life* (Newbury Park, CA: Pine Forge Press, 1993).

⁸⁷ Brian Quinn, "The McDonaldization of Academic Libraries?" *College & Research Libraries* 61, no. 3 (2000): 248-61, doi:10.5860/crl.76.3.339; Nicholson, "McDonaldization."

⁸⁸ Mirza and Seale, "Who Killed the World?" 185.

reports intended to woo the parents of future students and potential donors, academic libraries have become increasingly derivative and indistinguishable one from the other. The result is an array of cookie-cutter organizations, remarkable only in their common “failure to imagine that libraries can do more than serve the quotidian needs of neoliberal higher education priorities.”⁸⁹ The McDonaldized academic library “has ceased to be an ‘absolute space’ endowed with cultural significance, to instead become an abstract, globalized space, emptied of intrinsic meaning and given over to commercial use and generic identity, ‘like mini-marts, Wal-marts, McDonalds, and malls.’”⁹⁰

THE SPACE/TIME OF INFORMATION LITERACY SKILLS AND STANDARDS

In the second half of this paper, I will consider the spatial/temporal registers of information literacy as skills training for the global knowledge economy and a strategic priority intended to secure a role for the library within the university’s internationalization agenda.

The term “information literacy” was coined in 1974 by Paul Zurkowski, then President of the Information Industry of America (IIA), a national organization intended to serve the interests of private, for-profit associations concerned with the production and sale of information.⁹¹ For Zurkowski, information literacy represented “a critical stepping stone in the creation of wealth, a key element in the blueprint of national economic recovery.”⁹² *Ipsa facto*, the connection between information literacy, the commodification of information, and neoliberal economic reforms was established.

Information literacy emerges alongside Daniel Bell’s concept of the “post-industrial information society,”⁹³ today more commonly described as the knowledge economy. Despite the many limitations of Bell’s theory, it gained widespread popularity

⁸⁹ Sarah J. Coysh, William Denton, and Lisa Sloniowski, “Ordering Things,” in *The Politics of Theory and the Practice of Critical Librarianship*, eds. Karen P. Nicholson and Maura Seale (Sacramento, CA: Library Juice Press, 2018), 130.

⁹⁰ Nicholson, “McDonaldization,” 332.

⁹¹ William F. Birdsall, *The Myth of the Electronic Library: Librarianship and Social Change in America* (Westport, CT: Greenwood Press, 1994).

⁹² National Forum for Information Literacy, “Paul G. Zurkowski,” June 3, 2015, accessed October 15, 2015, <http://infolit.org/paul-g-zurkowski/>.

⁹³ Birdsall, *Myth of the Electronic Library*; Leigh S. Estabrook, ed., *Libraries in Post-Industrial Society* (Phoenix, AZ: Oryx Press, 1977); Stephen Paul Foster, “Information Literacy: Some Misgivings,” *American Libraries* 24, no. 4 (June 27, 1993): 344, <http://www.jstor.org/stable/25632883>; Michael C. Harris and Stan Hannah, *Into the Future: The Foundations of Library and Information Society in the Post-Industrial Era* (Norwood, NJ: Ablex Publishing, 1993).

as a model for theorizing the increasingly important societal role of information and technology and for making predictions about the future.⁹⁴ Moreover, because it suggested an enhanced role for the profession and an increase in the importance of LIS as a discipline, it garnered significant interest from librarians.⁹⁵ In the new economy, more people would work with information on a daily basis, and as a result, they would require a new set of information skills. In the 1980s, broad neoliberal educational reforms intended to better prepare workers for the information society were introduced in Anglo-American countries. Librarians saw information literacy as an opportunity to legitimate their role within this new higher education environment.⁹⁶ Defining information literacy “as a part of the wider literacy continuum” and linking it with the concept of lifelong learning were key strategies librarians used to underscore their value as workers and educators.⁹⁷ Early information literacy texts, filled with references to the “information age” and the “post-industrial information society,” manifest an uncritical assumption that quantitative changes in information had brought about a qualitative change in society, that is to say, because there was more information, the information society existed, *ex post facto*.⁹⁸ If the information society existed, librarians would be needed. As Birdsall described it,

Enthusiasm for the idea of an information society is so extensive that there is little questioning of this proposition among [librarians]. It is an accepted fact with little concern about how it is defined, where it is headed, how long it will last, or what its political, economic, and cultural implications are beyond the benefits that it is hoped will accrue.⁹⁹

The convergence of Bell’s theory of the information society with the neoliberal ideology of the Reagan administration had a profound impact on American information policy. The result was an increasingly pervasive belief that information as a resource and commodity held the key to economic recovery and growth. “President Reagan and his advisors were...persuaded by Daniel Bell’s vision of the post-industrial society which would be driven by the emergence of information as *the* commodity capable of fueling a dramatic renaissance in America.”¹⁰⁰

⁹⁴ Frank Webster, *Theories of the Information Society*, 4th ed. (New York: Routledge, 2014).

⁹⁵ Birdsall, *Myth of the Electronic Library*; Estabrook, *Libraries in Post-Industrial Society*.

⁹⁶ O’Connor, *Librarians’ Professional Struggles in the Information Age*.

⁹⁷ Kimmo Tuominen, Reijo Savolainen, and Sanna Talja, “Information Literacy as a Sociotechnical Practice,” *The Library Quarterly: Information, Community, Policy* 75, no. 3 (2005): 331, doi:10.1086/497311.

⁹⁸ Webster, *Theories of the Information Society*.

⁹⁹ Birdsall, *Myth of the Electronic Library*, 47.

¹⁰⁰ Harris and Hannah, *Into the Future*, 67, original emphasis.

Mainstream information literacy policy documents produced since the year 2000 by the likes of IFLA and UNESCO continue to be anchored in neoliberal competitive logics. “The common view of IL texts is that in the present knowledge economy there is a struggle for survival of the fittest and that those who possess sufficient technical and intellectual capacities will be able to consume information effectively.”¹⁰¹ These texts reproduce spatial/temporal binaries of development and present literacy as a set of decontextualized generic skills, masking the cultural and ideological assumptions that underpin it as a political, colonial project.¹⁰² Pilerot and Lindberg consider information literacy, as it is outlined in these same texts, to be an imperialist enterprise that seeks to export “a commodity produced in the Western world...to the so-called third world or developing countries.”¹⁰³ In putting forth a view of information literacy as liberatory, these texts convey “an ambition to carry out what we might call missionary work in the name of IL.”¹⁰⁴ In a similar vein, Hudson argues that the construction of information inequality in the global information inequality literature, “that body of work concerned centrally with global suffering and its connection to disparities in information access related to available content, technologies, infrastructure, and skills,”¹⁰⁵ “extends colonial mythologies of racial Otherness and Western civilizational superiority.”¹⁰⁶ Other disciplinary technologies or “boss texts,”¹⁰⁷ such as information literacy standards and frameworks, also work to situate, circumscribe, and enable the work of librarians within particular spatial/temporal registers. “Standards have produced the actual classroom space we are given in which to teach, defined for many of us the teaching roles we play in our libraries, and given us a place at the curricular table in many institutions.”¹⁰⁸ Standards mediate and regulate our information literacy practice across

¹⁰¹ Tuominen, Savolainen, and Talja, “Information Literacy as a Sociotechnical Practice,” 333-34.

¹⁰² New Literacy Studies scholar Brian Street refers to this as the “autonomous model” of literacy, in contrast to the “ideological model.” Brian V. Street, *Literacy in Theory and Practice* (Cambridge, UK: Cambridge University Press, 1984).

¹⁰³ Ola Pilerot and Jenny Lindberg, “The Concept of Information Literacy in Policy-Making Texts: An Imperialistic Project?” *Library Trends* 60, no. 2 (2011): 340, doi:10.1353/lib.2011.0040.

¹⁰⁴ Pilerot and Lindberg, 344.

¹⁰⁵ David James Hudson, “Unpacking ‘Information Inequality’: Toward a Critical Discourse of Global Justice in Library and Information Science,” *Canadian Journal of Information and Library Science* 36, no. 3/4 (October 4, 2012): 63, <https://muse.jhu.edu/article/486359>.

¹⁰⁶ Hudson, 62.

¹⁰⁷ According to feminist sociologist Dorothy Smith, “boss texts” “mediate, regulate and authorize people's activities ... [they] are to be seen as they enter into people's local practices of working, drawing, reading, looking and so on. They must be examined as they coordinate people's activities.” Dorothy E. Smith, “Texts and the Ontology of Organizations and Institutions,” *Studies in Cultures, Organizations and Societies* 7, no. 2 (May 1, 2001): 159, doi:10.1080/10245280108523557.

¹⁰⁸ Drabinski, “Towards a Kairos of Information Literacy,” 483.

institutions, across cultures, across borders. As a case in point, the *Framework¹⁰⁹ for Information Literacy for Higher Education* (the *Framework*), produced in 2015, has already been translated into Chinese, Farsi, French, Italian, and Spanish.¹¹⁰

Standards do not simply describe decontextualized realities such as accomplished teaching practice or competent teachers, however; they actively *produce* them. They are a form of rationalization—of McDonaldization. In mainstream discourse, educational standards function as a technology for producing good teaching, the material inscription of an extant, neutral, and codified knowledge base that the competent instructor has only to put into practice. This discourse masks the social, material, and political circumstances that give rise to standards and erases the “invisible work” that teachers and learners do to sustain them, however;¹¹¹ “the standard story of standards privileges the distal, and tends to repress, displace or efface the proximal.”¹¹² Using actor-network theory (ANT),¹¹³ Fenwick demonstrates how universal standards are always adapted locally, shifting the focus away from “standards as domination to standards as interplay and scaling.”¹¹⁴ Local adaptations represent “alternate orderings,” interdependent spaces of prescription and negotiation that co-exist together.¹¹⁵ Fenwick invokes the network “as sociomaterial performance” to illuminate the “dynamic, complex and contested” micropolitics of labor.¹¹⁶ In related work, Drabinski invokes the concept of *kairos*, a kind of qualitative time, as means of reorienting information literacy

¹⁰⁹ Association of College & Research Libraries, “Framework for Information Literacy for Higher Education,” February 2015, January 2016, accessed April 29, 2018, <http://www.ala.org/acrl/standards/ilframework>.

¹¹⁰ Association of College & Research Libraries, “Guidelines, Standards, and Frameworks by Topic,” accessed April 29, 2018, <http://www.ala.org/acrl/standards/standardsguidelinestopic>. It is interesting to note that those ACRL standards related to information literacy have been translated more than other ACRL standards.

¹¹¹ Dianne Mulcahy, “Assembling the ‘Accomplished’ Teacher: The Performativity and Politics of Professional Teaching Standards,” *Educational Philosophy and Theory* 43, no. SUPPL. 1 (2011): 95, doi:10.1111/j.1469-5812.2009.00617.x.

¹¹² *Ibid.*, 108.

¹¹³ Actor-network theory, “part of the shift from individualized, psychological approaches to the understanding of knowledge building to more social cultural interpretations,” assumes that learning and subjectivities are formed across networks of animate and inanimate objects through space and time. The network affords spaces of prescription and negotiation. Richard Edwards, “Mobilizing Lifelong Learning: Governmentality in Educational Practices,” *Education* 17, no. 3 (2002): 354, doi:10.1080/0268093021012760.

¹¹⁴ Tara J. Fenwick, “(un)Doing Standards in Education with Actor-Network Theory,” *Journal of Education Policy* 25, no. 2 (2010): 126, doi:10.1080/02680930903314277.

¹¹⁵ *Ibid.*, 126.

¹¹⁶ *Ibid.*, 119. Both Fenwick and Sharma draw attention to power and labor but Fenwick highlights the spatial whereas Sharma privileges the temporal.

instruction away from universal, atemporal standards “toward local and immediate contexts.”¹¹⁷ In my view, this kairotic and affective labour represents a form of “recalibration.” *Kairos* destabilizes the normative space/time of standards, allowing us to “understand standards of all kinds—which can come to seem natural and necessary and inevitable and true—as themselves produced contextually and in time, in response to local political, social, and economic relations.”¹¹⁸ It also enables us to see information literacy itself not as truth but as a “product of its time,” the intervention into higher education at a particular historic moment by librarians seeking to secure their future as “necessary employees in the workforce development program for a coming information economy.”¹¹⁹

Drabinski and Sitar use the *Framework* as a site to consider the performative work of standards, what “standards do and what they don’t.”¹²⁰ Intended to respond to critiques of the decontextualized, checklist approach of the *Information Literacy Competency Standards for Higher Education* (the *Standards*), the *Framework* features “six heuristic frames through which academic librarians can envision and implement local, contextual approaches to information literacy.”¹²¹ An attempt to find a middle ground between the prescriptive enumeration of skills outlined in the *Standards* and a more flexible “cluster of interconnected core concepts,” the *Framework* might be considered a mediating document, a kind of “bridgespace.”¹²² Drabinski and Sitar contend that in disavowing its status as a standard, as a disciplinary technology, however, the *Framework* loses the performative qualities of a standard necessary “to...secure librarians a seat at the table.”¹²³ It ceases to function as a distal universalizing political document, one that operates within multiple spatial registers and interpellates diverse actors, and instead becomes no more than a proximal, personal tool. In order to raise the profile of critical information literacy “from the domain of classroom practice to that of institutional critique,”¹²⁴ Drabinski and Sitar advocate for

¹¹⁷ Drabinski, “Toward a Kairos of Library Instruction,” 481.

¹¹⁸ *Ibid.*, 483.

¹¹⁹ *Ibid.*, 483.

¹²⁰ Emily Drabinski and Meghan Sitar, “What Standards Do and What They Don’t,” in *Critical Library Pedagogy Handbook. Volume 1, Essays and Workbook Activities*, eds. Kelly McElroy and Nicole Pagowsky, 53-64 (Chicago, IL: American Library Association, 2016).

¹²¹ *Ibid.*, 53.

¹²² A bridgespace is “a collection of interconnected virtual places that support people’s movement between two regions or countries and the sustenance of cultural ties at a distance.” Paul C. Adams and Rina Ghose, “India.com: The construction of a space between,” *Progress in Human Geography* 27 (2003): 419, quoted in Downey, “Human Geography and Information Studies,” 718.

¹²³ Drabinski and Sitar, “What Standards Do and What They Don’t,” 54.

¹²⁴ *Ibid.*, 54.

the continued, strategic, and flexible use of standards as “doorways” or mediating technologies that can facilitate the integration of information literacy into curriculum documents, strategic plans, and accreditation frameworks.

The *Framework* is, in many ways, an ambivalent and inconsistent document, as Hicks¹²⁵ and Seale¹²⁶ demonstrate. One might say it lacks spatial coherence, to use a metaphor invoked above. Hicks argues that the presence of threshold concepts and knowledge practices, both of which position information literacy as stable and bounded, runs counter to a sociocultural perspective which posits knowledge as contested and emergent.¹²⁷ Seale contends that although the *Framework* gestures towards sociocultural approaches to literacy, which foreground the importance of local context, it remains grounded in globalizing (neo)liberal narratives of individual progress and human/social capital investment. As the student “acquires knowledge practices and dispositions,” they advance along a continuum from “information illiterate to information literate.”¹²⁸ Moreover, the “expanded definition of information literacy” offered in the *Framework*, one that emphasizes “dynamism, flexibility, individual growth, and community learning,”¹²⁹ is based in the same problematic assumption found in many mainstream information literacy texts, namely, that “the learning of information skills will automatically lead to beneficial outcomes.”¹³⁰ Like many information literacy boss texts, the *Framework* links information literacy skills with technology, globalization, and the knowledge economy. The *Framework* states, “The rapidly changing higher education environment, along with the dynamic and often uncertain information ecosystem in which all of us work and live, require new attention to be focused on foundational ideas about that ecosystem.”¹³¹ Changes “out there”

¹²⁵ Alison Hicks, “Making the Case for a Sociocultural Perspective on Information Literacy,” in *The Politics of Theory and the Practice of Critical Librarianship*, eds. Karen P. Nicholson and Maura Seale (Sacramento, CA: Library Juice Press, 2018), 69-85.

¹²⁶ Maura Seale, “Enlightenment, Neoliberalism, and Information Literacy,” *Canadian Journal of Academic Librarianship* 1, no. 1 (2016): 80–91, <http://www.cjal.ca/index.php/capal/article/download/24308/19529>.

¹²⁷ Librarians hold multiple, often conflicting views of information literacy, however, as evidenced in debates surrounding the production of the *Framework*. For a summary of these debates, see Emily Drabinski, “Becoming Librarians, Becoming Teachers.” Early phenomenographic research by Bruce identified seven different conceptions, or “faces,” of information literacy. Christine S. Bruce, “The Phenomenon of Information Literacy,” *Higher Education Research & Development* 17, no. 1 (1998): 25–43, doi:10.1080/0729436980170102.

¹²⁸ Seale, “Enlightenment, Neoliberalism, and Information Literacy,” 85.

¹²⁹ Association of College & Research Libraries, “Framework for Information Literacy for Higher Education.”

¹³⁰ Tuominen, Savolainen, and Talja, “Information Literacy as a Sociotechnical Practice,” 333.

¹³¹ Association of College & Research Libraries, “Framework for Information Literacy for Higher Education.”

require librarians' immediate action "in here," on their local campus. Seale concludes, "the *Framework's* attempts to emphasize the context of the learner, the librarian, and the institution, as well as its claims to not be a standard, are in the end unsuccessful in the face of both its own internal contradictions and hegemonic liberalism."¹³² Ultimately, for the *Framework* to succeed as a standard, it must posit information literacy as an array of universal skills transferable to any context. It must hold to a model of literacy now widely discredited, despite its claim to "a richer, more complex set of core ideas"¹³³ about information literacy itself.

CONCLUSION

Moss suggests that "by giving time and space priority in the research design and analysis, there is the potential for a research approach which relates personal experience directly to a wider set of social, economic, and political relationships."¹³⁴ In this paper, I have explored the space/time of information literacy as a key library practice that seeks to legitimate the role of the academic library in the neoliberal university's globalizing agenda. Information literacy operates within multiple spatial and temporal registers: as a set of decontextualized generic skills for the knowledge economy, it seeks to prepare students for a changing future "out there." Normative information literacy texts reproduce the spatial/temporal binaries of development and progress inherent in neoliberal competitive logics and colonial discourse. Standards and frameworks also work to produce, regulate, and mediate the work of librarians within conflicting spatial/temporal registers such as global/local, atemporal/kairotic. Mainstream approaches to information literacy instruction in the contemporary academic library, such as the one-shot guest lecture and the two-minute video, are in perfect sync with the corporatized timescape of the neoliberal university.

Literacy practices are ideological, a contested site "between authority and power on the one hand and individual resistance and creativity on the other."¹³⁵ Space and time also perform political work and enact power, shaping identities and practices through particular codes and interests. Nathaniel F. Enright describes information literacy as a site of violence, one that reinscribes and reinforces self-interest and profit-seeking as the dominant subject formation: "So long as neoliberalism subordinates all

¹³² Seale, "Enlightenment, Neoliberalism, and Information Literacy," 85.

¹³³ Association of College & Research Libraries, "Framework for Information Literacy for Higher Education."

¹³⁴ Moss, *Gender, Space and Time*, 3.

¹³⁵ Brian Street, *Social Literacies: Critical Approaches to Literacy in Development, Ethnography and Education* (London: Longman, 1995), 162.

aspects of human development to the calculus of profit...there will be violence.”¹³⁶ If we believe information literacy can be a tool for social justice rather than a tool of oppression, Enright argues, we need to scrutinize it in the social, political, and economic contexts within which is it necessarily embedded.¹³⁷ The present article has been an attempt to consider the ways in which the space/time of information literacy, as a sociomaterial practice embedded within the broader context of higher education’s globalizing agenda, produces and regulates the subjectivities of library workers and those of our students.

¹³⁶ Nathaniel F. Enright, “The Violence of Information Literacy: Neoliberalism and the Human as Capital,” in *Information Literacy and Social Justice*, eds. Lua Gregory and Shana Higgins (Sacramento, CA: Library Juice Press, 2013), 33.

¹³⁷ *Ibid.*, 34.

BIBLIOGRAPHY

- Adam, Barbara. *Timescapes of Modernity: The Environment and Invisible Hazards*. London: Routledge, 1998.
- Association of College & Research Libraries. "Framework for Information Literacy for Higher Education." February 2015, January 2016. Accessed April 29, 2018. <http://www.ala.org/acrl/standards/ilframework>.
- Association of College & Research Libraries, and Megan Oakleaf. "Value of Academic Libraries: A Comprehensive Research Review and Report." Chicago, IL: Association of College & Research Libraries, 2010. http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/value/val_report.pdf.
- Bansel, Peter, and Bronwyn Davies. "The Time of Their Lives? Academic Workers in Neoliberal Time(s)." *Health Sociology Review* 14, no. 1 (March 11, 2005): 47–58.
- Behrens, Shirley J. "A Conceptual Analysis and Historical Overview of Information Literacy." *College & Research Libraries* 55, no. 4 (1994): 309–22. https://doi.org/10.5860/crl_55_04_309.
- Birdsall, William F. *The Myth of the Electronic Library: Librarianship and Social Change in America*. Westport, CT: Greenwood Press, 1994.
- Bossaller, Jenny, Christopher Sean Burns, and Amy VanScoy. "Re-Conceiving Time in Reference and Information Services Work: A Qualitative Secondary Analysis." *Journal of Documentation* 73, no. 1 (January 2017): 2–17. <https://doi.org/10.1108/JD-03-2016-0028>.
- Bruce, Christine S. "The Phenomenon of Information Literacy." *Higher Education Research & Development* 17, no. 1 (1998): 25–43. <https://doi.org/10.1080/0729436980170102>.
- Castells, Manuel. *The Rise of the Network Society*, Vol. 1 of *the Information Age: Economy, Society and Culture*. Oxford; Malden, MA: Blackwell Publishers, 1996.
- Clegg, Sue. "Time Future - the Dominant Discourse of Higher Education." *Time & Society* 19, no. 3 (2010): 345–64. <https://doi.org/10.1177/0961463X10381528>.
- Closet-Crane, Catherine. "A Critical Analysis of the Discourse on Academic Libraries as Learning Places." *Advances in Library Administration and Organization*, 30 (2011): 1–50. [https://doi.org/10.1108/S0732-0671\(2011\)0000030004](https://doi.org/10.1108/S0732-0671(2011)0000030004).
- Coffman, Steve, and Matthew L. Saxton. "Staffing the Reference Desk in the Largely-Digital Library." *Reference Librarian* 66 (1999): 141–63.

- Coysh, Sarah J., William Denton, and Lisa Sloniowski. "Ordering Things." In *The Politics of Theory and the Practice of Critical Librarianship*, edited by Karen P. Nicholson and Maura Seale, 129–44. Sacramento, CA: Library Juice Press, 2018. <https://yorkspace.library.yorku.ca/xmlui/handle/10315/34415>.
- Cresswell, Tim. *Place: A Short Introduction*. Malden, MA: Blackwell Publishers, 2004.
- de Wit, Hans, Jane Knight, and the Organisation for Economic Co-operation and Development. *Quality and Internationalisation in Higher Education*. Paris: Organisation for Economic Co-operation and Development, 1999.
- Dempsey, Lorcan, Constance Malpas, and Brian Lavoie. "Collection Directions: The Evolution of Library Collections and Collecting." *portal: Libraries and the Academy* 14, no. 3 (2014): 393–423. <https://doi.org/10.1353/pla.2014.0013>.
- Downey, Greg. "Human Geography and Information Studies." *Annual Review of Information Science and Technology* 41, no. 1 (2007): 683–727. <https://doi.org/10.1002/aris.2007.1440410122>.
- Drabinski, Emily. "Toward a Kairos of Library Instruction." *Journal of Academic Librarianship* 40, no. 5 (2014): 480–85. <https://doi.org/10.1016/j.acalib.2014.06.002>.
- . "Becoming Librarians, Becoming Teachers: Kairos and Professional Identity." *Canadian Journal of Information and Library Science* 40, no. 1 (2016): 27–36. <https://muse.jhu.edu/article/611575>.
- Drabinski, Emily, and Meghan Sitar. "What Standards Do and What They Don't." In *Critical Library Pedagogy Handbook. Volume 1, Essays and Workbook Activities*, edited by Kelly McElroy and Nicole Pagowsky, 53-64. Chicago, IL: American Library Association, 2016.
- Edwards, Richard. "Mobilizing Lifelong Learning: Governmentality in Educational Practices." *Education* 17, no. 3 (2002): 353-65. <https://doi.org/10.1080/0268093021012760>.
- Enright, Nathaniel F. "The Violence of Information Literacy: Neoliberalism and the Human as Capital." In *Information Literacy and Social Justice*, edited by Lua Gregory and Shana Higgins, 15–38. Sacramento, CA: Library Juice Press, 2013.
- Estabrook, Leigh S. ed. *Libraries in Post-Industrial Society*. Phoenix, AZ: Oryx Press, 1977.
- Fenwick, Tara J. "(un)Doing Standards in Education with Actor-Network Theory." *Journal of Education Policy* 25, no. 2 (2010): 117–33. doi:10.1080/02680930903314277.
- Foster, Stephen Paul. "Information Literacy: Some Misgivings." *American Libraries* 24, no. 4 (June 27, 1993): 344, 346. <http://www.jstor.org/stable/25632883>.

- Giroux, Henry A., and Susan Searls Giroux. *Take Back Higher Education: Race, Youth, and the Crisis of Democracy in the Post-Civil Rights Era*. New York, NY: Palgrave, 2004.
- Grosz, Elizabeth. *Time Travels*. Durham, NC: Duke University Press, 2005.
- Hall, Stuart, and Alan O'Shea. "Common-Sense Neoliberalism." *Soundings: A Journal of Politics and Culture* 55, no. 1 (2013): 8–24. <https://muse.jhu.edu/article/531183>.
- Hancock, Philip, and André Spicer. "Academic Architecture and the Constitution of the New Model Worker." *Culture and Organization* 17, no. 2 (2010): 1-19. <http://openaccess.city.ac.uk/15600/>.
- Harris, Michael C. and Stan Hannah. *Into the Future: The Foundations of Library and Information Society in the Post-Industrial Era*. Norwood, NJ: Ablex Publishing, 1993.
- Harvey, David. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Malden, MA: Blackwell Publishers, 1989.
- . *Justice, Nature and the Geography of Difference*. Cambridge, MA: Blackwell Publishers, 1996.
- . *A Brief History of Neoliberalism*. New York: Oxford University Press, 2007.
- Hassan, Robert. *The Chronoscopic Society: Globalization, Time and Knowledge in the Network Economy*. New York: Peter Lang, 2003.
- . *The Information Society*. Malden, MA: Polity, 2008.
- Hicks, Alison. "Making the Case for a Sociocultural Perspective on Information Literacy." In *The Politics of Theory and the Practice of Critical Librarianship*, edited by Karen P. Nicholson and Maura Seale, 69-85. Sacramento, CA: Library Juice Press, 2018.
- Hudson, David James. "Unpacking 'Information Inequality': Toward a Critical Discourse of Global Justice in Library and Information Science." *Canadian Journal of Information and Library Science* 36, no. 3/4 (2012): 69–87. <https://muse.jhu.edu/article/486359>.
- Marginson, Simon, and Gary Rhoades. "Beyond National States, Markets, and Systems of Higher Education: A Glonacal Agency Heuristic." *Higher Education* 43, no. 3 (2002): 281–309.
- Massey, Doreen. "Politics and Space/Time," *New Left Review*, no. 196 (1992).

- . “Imagining Globalization: Power-Geometries of Time-Space.” In *Global Futures: Migration, Environment and Globalization*, edited by Avtar Brah, Mary J. Hickman, and Máirtín Mac an Ghaill, 27-44. London: Palgrave Macmillan UK, 1999. doi:10.1057/9780230378537_2.
- . “Don’t Let’s Counterpose Place and Space.” *Development* 45, no. 1 (March 2002): 24-25. doi:10.1057/palgrave.development.1110312.
- Matus, Claudia, and Susan Talburt. “Spatial Imaginaries: Universities, Internationalization, and Feminist Geographies.” *Discourse: Studies in the Cultural Politics of Education* 30, no. 4 (December 2009): 515–27. <https://doi.org/10.1080/01596300903237271>.
- . “Producing Global Citizens for the Future: Space, Discourse and Curricular Reform.” *Compare* 45, no. 2 (2015): 226–47. <https://doi.org/10.1080/03057925.2013.842682>.
- Menzies, Heather, and Janice Newson. “No Time to Think: Academics’ Life in the Globally Wired University.” *Time & Society* 16, no. 1 (2007): 83–98. <https://doi.org/10.1177/0961463X07074103>.
- Mirza, Rafia, and Maura Seale. “Who Killed the World? White Masculinity and the Technocratic Library of the Future.” In *Topographies of Whiteness: Mapping Whiteness in Library and Information Science*, edited by Gina Schlesselman-Tarango, 171–97. Sacramento, CA: Library Juice Press, 2017.
- Moss, Dorothy. *Gender, Space and Time: Women and Higher Education*. Lanham, MD: Lexington Books, 2006.
- Mountz, Alison, Anne Bonds, Becky Mansfield, Jenna Loyd, Jennifer Hyndman, Margaret Walton-Roberts, Ranu Basu, et al. “For Slow Scholarship: A Feminist Politics of Resistance through Collective Action in the Neoliberal University.” *ACME International E-Journal for Critical Geographies* 14, no. 4 (2015): 1235–59. <https://www.acme-journal.org/index.php/acme/article/view/1058>.
- Mulcahy, Dianne. “Assembling the ‘Accomplished’ Teacher: The Performativity and Politics of Professional Teaching Standards.” *Educational Philosophy and Theory* 43, no. SUPPL. 1 (2011): 94–113. <https://doi.org/10.1111/j.1469-5812.2009.00617.x>.
- Nicholson, Karen P. “The McDonaldization of Academic Libraries and the Values of Transformational Change.” *College & Research Libraries* 76, no. 3 (2015): 328–38. <https://doi.org/10.5860/crl.76.3.328>.

- . “‘Taking Back’ Information Literacy: Time and the One-Shot in the Neoliberal University.” In *Critical Library Pedagogy Handbook. Volume 1, Essays and Workbook Activities*, edited by Kelly McElroy and Nicole Pagowsky, 25–39. Chicago: Association of College & Research Libraries, 2016.
<https://ir.lib.uwo.ca/cgi/viewcontent.cgi?article=1045&context=fimspub>.
- O’Connor, Lisa G. *Librarians’ Professional Struggles in the Information Age: A Critical Analysis of Information Literacy*. Ph.D Diss., Kent State University, 2006.
- Olds, Kris. “Are We Witnessing Denationalization of the Higher Education Media?” *Global Higher Ed: Surveying the Construction of Global Knowledge/Spaces for the “Knowledge Economy.” Inside Higher Ed*. July 15, 2010. Accessed April 29, 2018.
https://www.insidehighered.com/blogs/globalhighered/are_we_witnessing_denationalization_of_the_higher_education_media.
- Olssen, Mark, and Michael A. Peters. “Neoliberalism, Higher Education and the Knowledge Economy: From the Free Market to Knowledge Capitalism.” *Journal of Education Policy* 20, no. 3 (2005): 313–45.
<https://doi.org/10.1080/02680930500108718>.
- Pilerot, Ola, and Jenny Lindberg. “The Concept of Information Literacy in Policy-Making Texts: An Imperialistic Project?” *Library Trends* 60, no. 2 (2011): 338–60.
<https://doi.org/10.1353/lib.2011.0040>.
- Powell, Jason L. “Globalization and Modernity.” *International Letters of Social and Humanistic Sciences* 28 (2014): 1–60. <https://www.scipress.com/ILSHS.28.1.pdf>.
- Quinn, Brian. “The McDonaldization of Academic Libraries?” *College & Research Libraries* 61, no. 3 (2000): 248–61. <https://doi.org/10.5860/crl.76.3.339>.
- Readings, Bill. *The University in Ruins*. Cambridge, MA: Harvard University Press, 1997.
- Ritzer, George. *The McDonaldization of Society: An Investigation Into the Changing Character of Contemporary Social Life*. Newbury Park, CA: Pine Forge Press, 1993.

- Robertson, Susan. "Challenges Facing Universities in a Globalising World." In *International Seminar on Quality in Higher Education: Indicators and Challenges*. Porto Alegre, Brazil, 2010. Accessed April 29, 2018. <http://susanleerobertson.files.wordpress.com/2012/07/2010-robertson-challenges.pdf>.
- Robertson, Susan. "World-Class Higher Education (for Whom?)." *Prospects* 42, no. 3 (2012): 237–45. <https://doi.org/10.1007/s11125-012-9236-8>.
- Rottenberg, Catherine. "The Rise of Neoliberal Feminism." *Cultural Studies* 28, no. 3 (2014): 418–37. <https://doi.org/10.1080/09502386.2013.857361>.
- Sassen, Saskia. "Globalization or Denationalization?" *Review of International Political Economy* 10, no. 1 (2003): 1-22. <http://www.saskiasassen.com/PDFs/publications/Globalization-or-Denationalization.pdf>.
- Seale, Maura. "Enlightenment, Neoliberalism, and Information Literacy." *Canadian Journal of Academic Librarianship* 1, no. 1 (2016): 80–91. <http://www.cjal.ca/index.php/capal/article/download/24308/19529>.
- Shahjahan, Riyad A. "Being 'Lazy' and Slowing down: Toward Decolonizing Time, Our Body, and Pedagogy." *Educational Philosophy and Theory* 47, no. 5 (2015): 488–501. <https://doi.org/10.1080/00131857.2014.880645>.
- Sharma, Sarah. *In the Meantime: Temporality and Cultural Politics*. Raleigh-Durham, NC: Duke University Press, 2014.
- Slaughter, Sheila, and Larry Leslie. *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Baltimore, MD: Johns Hopkins University Press, 1997.
- Sloniowski, Lisa. "Affective Labor, Resistance, and the Academic Librarian." *Library Trends* 64, no. 4 (2016): 645–66. <https://doi.org/10.1353/lib.2016.0013>.
- Smith, Dorothy E. "Texts and the Ontology of Organizations and Institutions." *Studies in Cultures, Organizations and Societies* 7, no. 2 (May 1, 2001): 159–98. <https://doi.org/10.1080/10245280108523557>.
- Street, Brian V. *Literacy in Theory and Practice*. Cambridge, UK: Cambridge University Press, 1984.
- . *Social Literacies: Critical Approaches to Literacy in Development, Ethnography and Education*. London: Longman, 1995.
- Thorsen, Dag Einar, and Amund Lie (n.d.). *What is Neo-Liberalism?* Accessed July 13, 2018, <http://folk.uio.no/daget/neoliberalism.pdf>.

- Thrift, Nigel. "Space: The Fundamental Stuff of Geography." In *Key Concepts in Geography*, edited by Gill Valentine, Sarah L. Holloway, and Stephen P. Rice, 95–108. Thousand Oaks, CA: SAGE, 2003.
- Torres, Carlos Alberto. "Public Universities and the Neoliberal Common Sense: Seven Iconoclastic Theses." *International Studies in Sociology of Education* 21, no. 3 (2011): 177–97. <https://doi.org/10.1080/09620214.2011.616340>.
- Tuominen, Kimmo, Reijo Savolainen, and Sanna Talja. "Information Literacy as a Sociotechnical Practice." *The Library Quarterly* 75, no. 3 (2005): 329–45. <https://doi.org/10.1086/497311>.
- Urciuoli, Bonnie. "Skills and Selves in the New Workplace." *American Ethnologist* 35, no. 2 (2008): 211–28. <https://doi.org/10.1111/j.1548-1425.2008.00031.x>.
- Walker, Judith. "Time as the Fourth Dimension in the Globalization of Higher Education." *Journal of Higher Education* 80, no. 5 (2009): 483–509. <https://doi.org/10.1353/jhe.0.0061>.
- Webster, Frank. *Theories of the Information Society*. 4th ed. New York: Routledge, 2014.
- Widdicombe, Richard P. "Evolution of a Revolution." *Science & Technology Libraries* 24, no. 1–2 (2004): 187–94. https://doi.org/10.1300/J122v24n01_12.
- Ylijoki, Oili-Helena, and Hans Mäntylä. "Conflicting Time Perspectives in Academic Work." *Time & Society* 12, no. 1 (2003): 55–78. <https://doi.org/10.1177/0961463X03012001364>.