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THE OPEN COURSEWARE MOVEMENT IN HIGHER EDUCATION:
UNMASKING POWER AND RAISING QUESTIONS ABOUT
THE MOVEMENT'S DEMOCRATIC POTENTIAL

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ABSTRACT. In this essay Robert Rhoads, Jennifer Berdan, and Brit Toven-Lindsey examine some of the key literature related to the open courseware (OCW) movement (including the emergence and expansion of massive open online courses, or MOOCs), focusing particular attention on the movement's democratic potential. The discussion is organized around three central problems, all relating in some manner or form to issues of power: the problem of epistemology, the problem of pedagogy, and the problem of hegemony. More specifically, the authors raise issues related to the narrow notion of knowledge typically conveyed in the OCW movement, a limited understanding of what constitutes empowering pedagogy, and the lack of treatment of inequities associated with the production of courseware materials. The authors go on to argue that the lack of critical analysis of the OCW movement is tied to its relative alignment with educational reforms driven by neoliberal ideology and that such alignment serves to limit the movement's democratic possibilities.

INTRODUCTION

With advances in web technologies over the past two decades, educational opportunities accessible through the Internet have expanded dramatically.¹ The Web 2.0, as some have described it, has enabled users to interact with knowledge and information in more active and collaborative ways in a variety of educational formats. Indeed, the term "social learning" has become common parlance among many Internet-savvy educators, instructional development staff, and technology and information scholars when they speak of contemporary online learning or e-learning opportunities.² A cornucopia of Internet-related educational innovations — including social networking, blogs, wikis, cognitive tutors, virtual learning communities, and learning management systems (LMS) — have enabled further advances in the sharing of educational ideas, materials, and knowledge.³

1. Daniel E. Atkins, John Seely Brown, and Allen L. Hammond, "A Review of the Open Educational Resources (OER) Movement: Achievements, Challenges, and New Opportunities" (San Francisco: Creative Commons License, 2007); Curtis J. Bonk, *The World Is Open: How Web Technology Is Revolutionizing Education* (San Francisco: Jossey-Bass, 2009); and John Seely Brown and Richard P. Adler, "Minds on Fire: Open Education, the Long Tail, and Learning 2.0," *Educuse Review* 43, no. 1 (2008): 17–22.

2. John Seely Brown, "Foreword: Creating a Culture of Learning," in *Opening Up Education: The Collective Advancement of Education Through Open Technology, Open Content, and Open Knowledge*, Creative Commons edition, ed. Toru Iiyoshi and M.S. Vijay Kumar (Princeton, New Jersey: Carnegie Foundation for the Advancement of Teaching, 2008), xi–xvii; and Brown and Adler, "Minds on Fire."

3. Atkins, Brown, and Hammond, "A Review of the Open Educational Resources (OER) Movement"; Brown, "Foreword: Creating a Culture of Learning"; Brown and Adler, "Minds on Fire"; and Thomas E. Malloy, Gary C. Jensen, Alison Regan, and Mary Reddick, "Open Courseware and Shared Knowledge in Higher Education," *Behavior Research Methods, Instruments, and Computers* 34, no. 2 (2002): 200–203.

A growing practice worldwide is the organization of educational resources as core components of a university course that is then made openly available through the Internet to anyone with a computer and a connection. These types of courses, commonly described as MOOCs (massive open online courses), are the foundation of the open courseware (OCW) movement, where the term "open" is commonly understood as "no cost to the consumer or user of the resource."⁴ The OCW movement may be best understood as a subcomponent of the broader open educational resources (OER) movement,⁵ with open educational resources defined as "digitised materials offered openly and freely to educators, students, and self-learners to use and reuse for teaching, learning, and research."⁶ Viewing OCW as a subcomponent of the OER movement is consistent with Stephen Downes's description of what constitutes OER,⁷ in that course-related content is only one facet of a broader body of resources that also includes software (for example, learning management systems), papers and monographs, contacts and mentoring, animations, simulations, games, and demonstrations. The reality that the OCW movement has helped to make increasing numbers of higher education courses and their materials openly available at a global level holds the potential to revolutionize how higher education practitioners, scholars, and policymakers think about and define democratic forms of access. Along these lines, and writing about the transformative nature of the present age, David Wiley advised the higher education community "to open their eyes to what is happening all around . . . on YouTube, on Flickr, on Wikipedia, on Facebook, and

4. Stephen Downes, "Models for Sustainable Open Educational Resources," *Interdisciplinary Journal of Knowledge and Learning Objects* 3 (2007): 32.

5. Norm Friesen, "Open Educational Resources: New Possibilities for Change and Sustainability," *International Review of Research in Open and Distant Learning* 10, no. 5 (2009), <http://www.irrodl.org/index.php/irrodl/rt/printerFriendly/664/1388>.

6. Ahrash N. Bissell, "Permission Granted: Open Licensing for Educational Resources," *Open Learning: The Journal of Open, Distance, and e-Learning* 24, no. 1 (2009): 97.

7. Downes, "Models for Sustainable Open Educational Resources."

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evolve with the times rather than be left behind by them. The Industrial Age is over."⁸

Both the OCW and OER movements derive their energy from a growing commitment to open and accessible knowledge and information, reflected in the ideal of a knowledge commons.⁹ From such a perspective, existing knowledge and information should be freely available to serve the commonweal. Seen in this light, open access to knowledge and information is recognized as a basic human right.¹⁰ Ahrash Bissell put it quite succinctly: "Knowledge can and should be free."¹¹ Such a perspective is consistent with Article 26 of the United Nations' Universal Declaration of Human Rights: "everyone has the right to education" and "higher education shall be equally accessible to all on the basis of merit."¹² Although both the OCW and OER movements are critical to the Internet-based expansion of access to knowledge, the former movement is of particular interest to us as it holds the potential to broaden access to higher education in a significant manner.

Most notable among OCW initiatives is the Massachusetts Institute of Technology's OpenCourseWare Project, also known as MIT OCW, described by Daniel Atkins, John Seely Brown, and Allen Hammond as "the flagship" of OCW initiatives and "world changing" in terms of its impact.¹³ Launched in 2001, MIT OCW has been described as "a visionary commitment by the Institute to publish the materials from all MIT undergraduate and graduate subjects freely and openly on the Web for permanent worldwide use."¹⁴ Carnegie Mellon University (CMU), in contrast to MIT, has used significant funds to produce a smaller list of high-quality open courses through its Open Learning Initiative (OLI). CMU's OLI offerings differ significantly from MIT's much more expansive collection of less technologically dynamic course materials in that the OLI venture incorporates "cognitive tutors, virtual laboratories, group experiments, and simulations" and generally is guided by cognitive science, formative evaluation, and iterative course enhancement processes.¹⁵

8. David Wiley, "2005–2012: The OpenCourseWars," in *Opening Up Education*, ed. Iiyoshi and Kumar, 259.

9. Bissell, "Permission Granted."

10. Tom Caswell, Shelley Henson, Marion Jensen, and David Wiley, "Open Educational Resources: Enabling Universal Education," *International Review of Research in Open and Distance Learning* 9, no. 1 (2008), <http://www.irrodl.org/index.php/irrodl/article/view/469/1001>.

11. Bissell, "Permission Granted," 98.

12. Henk Huijser, Tas Bedford, and David Bull, "OpenCourseWare, Global Access, and the Right to Education: Real Access or Marketing Ploy?" *International Review of Research in Open and Distance Learning* 9, no. 1 (2008), <http://www.irrodl.org/index.php/irrodl/article/view/446/1002>.

13. Atkins, Brown, and Hammond, "A Review of the Open Educational Resources (OER) Movement," 8.

14. Hal Abelson, "The Creation of OpenCourseWare at MIT," *Journal of Science Education and Technology* 17, no. 2 (2008): 164.

15. Atkins, Brown, and Hammond, "A Review of the Open Educational Resources (OER) Movement," 12.

Similar in some ways to the CMU initiative, although less costly and not nearly as technologically advanced, Yale University also has focused on a smaller set of courses. Established in 2007, in part as a by-product of Yale's falling out with the more commercialized, multi-institutional AllLearn initiative (involving Oxford, Princeton, Stanford, and Yale), Yale leaders sought to offer a more complete user experience by developing a couple dozen or so courses, while offering lecture videos of some of the university's most popular courses (taught by highly regarded professors) along with other course-related materials.¹⁶ AllLearn, as well as Fathom (an initiative led by Columbia), were early collaborations among groups of universities seeking to maximize revenue by taking advantage of the emerging technologies associated with the Internet. Although AllLearn and Fathom represented initial attempts at commercializing courseware, and in this regard do not really fit the open and free ideals of the OCW movement, they nonetheless played an important role in laying the groundwork for future noncommercialized OCW endeavors (see *UG*).

The OCW movement is potentially revolutionary in that in addition to making university course materials available for instructors and informal learners around the world, there is also the possibility for students (as more formalized learners) to earn university credit, possibly working toward badges, certificates, or even an online baccalaureate.¹⁷ These possibilities may generate incredible financial savings for students globally, whether in the form of a few course credits to be transferred to more traditional brick-and-mortar universities or in the form of progress toward the fulfillment of an online degree granted by emerging Internet-based entities such as University of the People, an international, tuition-free, nonprofit university founded in 2009 and offering two- and four-year degrees in computer science and business administration.¹⁸

Although the increasing accessibility of knowledge and information in the form of open courseware clearly has the potential to transform higher education access in important democratic ways, significant issues nonetheless exist. In

16. Taylor Walsh, *Unlocking the Gates: How and Why Leading Universities Are Opening Up Access to Their Courses* (Princeton, New Jersey: Princeton University Press, 2011). This work will be cited in the text as *UG* for all subsequent references.

17. Nick DeSantis, "Badge-Based Learning Competition Names Winners," *Chronicle of Higher Education*, March 2, 2012, <http://chronicle.com/blogs/wiredcampus/badge-based-learning-competition-names-winners/35638>; Nick DeSantis, "Groups Team Up to Turn Free Online Courses into Cheap College Credit," *Chronicle of Higher Education*, May 9, 2012, <http://chronicle.com/blogs/wiredcampus/groups-team-up-to-turn-free-online-courses-into-cheap-college-credit/36312>; Steve Kolowich, "Company Unveils Line of Free Online Courses from Elite College Faculty," *Inside Higher Ed*, January 27, 2012, <http://www.insidehighered.com/news/2012/01/27/company-unveils-line-free-online-courses-elite-college-faculty>; and Katherine Mangan, "A First for Udacity: A U.S. University Will Accept Transfer Credit for One of Its Courses," *Chronicle of Higher Education*, September 6, 2012, <http://chronicle.com/article/A-First-for-Udacity-Transfer>.

18. Peter Monaghan, "NYU Dean to Devote His Sabbatical to Expanding U. of the People," *Chronicle of Higher Education*, May 6, 2012, <http://chronicle.com/article/NYU-Dean-to-Devote-His>.

particular, we see three interrelated sets of issues, framed in terms of three fundamental problems: (1) the problem of epistemology, (2) the problem of pedagogy, and (3) the problem of hegemony. The problem of epistemology concerns the narrow notion of knowledge typically conveyed in the OCW movement. The problem of pedagogy relates to a limited understanding of what constitutes empowering teaching. And the problem of hegemony relates to a lack of treatment of inequities associated with the production of courseware materials. We discuss these fundamental problems by calling on some of the key literature that has helped to articulate the form and substance of the OCW movement, while also integrating theoretical works that help to inform our critique. The theoretical insights of Michel Foucault and Paulo Freire are particularly helpful to our argument. Finally, we build on a discussion of the OCW literature and our critique to advance an argument explaining the ideological foundations that tend to undergird the rapid and widespread growth of the OCW movement.

THE PROBLEM OF EPISTEMOLOGY

The OCW literature tends to point to a preponderance of course content coming from the natural, hard, and applied sciences. This is quite apparent in case studies of some of the leading OCW initiatives, as delineated in Taylor Walsh's *Unlocking the Gates: How and Why Leading Universities Are Opening Up Access to Their Courses*. For example, CMU's OLI, which can spend anywhere from \$500,000 to \$1,000,000 to develop a single course, "tends to support courses aimed at skill acquisition — topics on which students' progress can be evaluated objectively and in which there is a single correct answer" (UG, 97). As Walsh points out, such courses correlate with CMU's "strength in engineering" (UG, 97). The National Programme on Technology Enhanced Learning (NPTEL) in India, also discussed by Walsh, is focused entirely on "a curriculum in science and engineering," targeting students in five primary disciplines: civil engineering, electrical engineering, computer science and engineering, electronics and communication engineering, and mechanical engineering (UG, 190). Furthermore, Udacity, an online-education start-up company cofounded by Stanford University professor Sebastian Thrun, has developed a computer science course (CS101) now accepted for credit at Colorado State University's Global Campus.¹⁹ To earn the credit, students simply have to pass a proctored exam administered by Pearson VUE testing group at a cost of \$89 (of course, there is the little problem of whether or not such a center exists near one's locale).²⁰ Such an exam, of course, is based on a clearly defined set of skills and understandings, which enables testing center staff to easily score exam answers. A quick glance at Udacity's website reveals a number of interesting courses, but these are limited mostly to computer science (for example, "Intro to Computer Science" and "Artificial Intelligence: Programming a Robotic Car"), mathematics ("Differential

19. On his homepage, Thrun explains that he is "trying to democratize higher education"; see <http://robots.stanford.edu/>. The Udacity website is at <https://www.udacity.com/>.

20. Mangan, "A First for Udacity."

Equations: Making Math Matter"), physics ("Intro to Physics"), and statistics ("Intro to Statistics").

Throughout the literature on OCW initiatives, the discussion tends to focus on the development of courses in topical areas where knowledge and information typically get defined in relatively concrete ways. At CMU, OLI courses include "mini-tutors," wherein "students answer practice questions and receive targeted feedback" (UG, 93). Walsh points out that CMU OLI has not developed courses in the humanities, noting that some OLI staff are skeptical of such educational methods working in all disciplines, given that OLI-type environments seem best suited for courses that demand a degree of "fact retrieval" (UG, 98). Walsh further notes that at webcast.berkeley (the University of California at Berkeley's OCW initiative), science courses are more likely to be included as webcasts due to the fact that science-related departments tend to be better endowed and thus can cover the \$2,000 charge the university requires to develop a web-based course. If course content in the humanities and social sciences is discussed within the context of the OCW literature, more times than not it is simply in terms of recorded lectures by distinguished professors. Open Yale Courses is a relevant example in that some of the university's "most distinguished faculty" — the "giants as scholars" — have been involved in OYC projects of this nature (UG, 133).

What are the implications of an Internet-based knowledge system in which certain disciplines and fields of inquiry become further marginalized by their lack of visibility? What forms of knowledge are likely to be advanced if computers must be utilized to evaluate quizzes and tests using a simplistic right or wrong format? What is the risk of the OCW movement becoming simply another extension of the forms of academic capitalism described by Sheila Slaughter and Gary Rhoades, wherein the only academic subjects that really matter are those that somehow connect to the flow of capital?²¹ Despite the importance of such questions, the reality is that they seldom if ever are raised within the context of the OCW/OER literature.

What we see, then, is that OCW initiatives are dominated by a fairly narrow notion of knowledge, one that comes quite close to the notion of information, which we might think of simply as sets of facts, pieces of data, or concrete bits of a larger process. Exercises can be developed, perhaps using elaborative cognitive science methodologies as CMU has, to distribute quizzes and problem sets, all of which can easily be scored by appropriate computer software or testing center staff (in the case of Udacity's CS101). Content having diverse and multiple creative solutions does not seem to fit the dominant logic and technologies of OCW course development. The same might be said about course content having significant political and cultural complexity. Indeed, positivist notions of knowledge seem most suitable for OCW initiatives; by "positivist," we mean forms of knowledge

21. Sheila Slaughter and Gary Rhoades, *Academic Capitalism and the New Economy: Markets, State, and Higher Education* (Baltimore, Maryland: Johns Hopkins University Press, 2004).

wherein truth is seen as existing within a particular environment or reality, and as such, students can be tested relative to their ability to regurgitate accurate conceptions of an existing fact-based reality. This is a fairly normative vision of knowledge and ought to raise some serious concerns about the growing expansion of OCW initiatives, given the likelihood that such limited notions of truth (and of reality) have the potential to increase in influence.

We need to further explore the relation between power and knowledge in order to better understand the democratic limitations of the OCW movement. In this endeavor, we see Foucault as especially helpful. From Foucault's perspective, power operates not only as a source of repression or punishment, but also through generating normative understandings, including at the level of desire. As he explained,

Power would be a fragile thing if its only function were to repress, if it worked only through the mode of censorship, exclusion, blockage and repression, in the manner of the great Superego, exercising itself only in a negative way. If, on the contrary, power is strong this is because ... it produces effects at the level of desire — and also at the level of knowledge. Far from preventing knowledge, power produces it.²²

Foucault's analysis offers some insight into the complex operations of power and a glimpse into the potential of the OCW movement to advance particular interests, particular expressions of knowledge. The forms of knowledge at the center of the OCW movement are much more likely to be tied to a narrow notion of science, grounded in positivist or postpositivist understandings of the world; such versions of knowledge tend to ignore or further marginalize what Jean-François Lyotard described as "narrative" knowledge — a form of understanding not so easily framed in black and white terms, less conducive to right or wrong answers, and, of course, difficult to frame in terms of an online cognitive tutor or a computer-graded exam. For Lyotard, power also operates in the enactment of what counts as truth, or what counts as reality. As he put it, "Who decides the conditions of truth?"²³

To further understand the implications of the OCW movement with regard to its potential as an antidemocratic force, it is necessary to dig a little deeper into Foucault's work. The heart of the matter for us is his construction of power and how it operates in society. For Foucault, power is never simply in the hands of one individual or group, but instead operates everywhere, with everyone holding some potential to induce the effects of power. As he explained, "One doesn't have ... a power which is wholly in the hands of one person who can exercise it alone and totally over the others. It's a machine in which everyone is caught, those who exercise power just as much as those over whom it is exercised" (*PK*, 156). Interestingly enough, the machine metaphor at times is replaced by Foucault with

22. Michel Foucault, *Power/Knowledge* (New York: Pantheon, 1980), 59. This work will be cited in the text as *PK* for all subsequent references.

23. Jean-François Lyotard, *The Postmodern Condition* (Minneapolis: University of Minnesota Press, 1984), 7.

a “web” or “network”; for example, Foucault described power operating within “a net-like organization” (*PK*, 98), existing as a “web of power” (*PK*, 116). He elaborated,

Power must be analysed as something which circulates, or rather as something which only functions in the form of a chain. It is never localized here or there, never in anybody’s hands, never appropriated as a commodity or piece of wealth. Power is employed and exercised through a net-like organization. (*PK*, 98)

Foucault offered rich examples of how modern societies have enabled the deployment of power across a broad landscape, the operation of which he described as a form of “surveillance,” wherein the normalization of behaviors and identities is advanced not simply through “legislation and constitution” in the form of “the state and the state apparatus,” but is dispersed throughout society, in part through notions of normality (*PK*, 158). In a sense, we have all become “our brother’s and sister’s keeper,” so to speak, providing surveillance of one another, even of ourselves, keeping each other in line on the basis of normality’s constraints, including the normalization of particular identities: “There is no need for arms, physical violence, material constraints. Just a gaze. An inspecting gaze, a gaze which each individual under its weight will end by interiorising to the point that he is his own overseer, each individual thus exercising this surveillance over, and against, himself” (*PK*, 155). Metaphorically, this all-seeing gaze is captured in Foucault’s discussion of Jeremy Bentham’s Panopticon.

Foucault’s theorizing about power offers some provocative insights when directed at information and knowledge domains such as the Internet, Web of Learning, and, most specific to our purposes, the OCW movement, including the proliferation of MOOCs. What we see in summarizing the key literature is a totalizing account of a new revolutionary form of networked space. The narrative is consistent for the most part and advances a line of thought wherein open access to course-based knowledge and information through the OCW movement is to serve the advance of democracy. We are instructed to believe that courses offered by universities, faculty, or individual content producers ultimately hold the potential to democratize knowledge. Although it seems reasonable to stress the democratic potential of the OCW movement — after all, most of the information and knowledge is available for free — the net-like potential for the exercise of power through OCW initiatives in grand scale brings to mind forms of surveillance operating as a normalizing gaze Foucault could not possibly have imagined prior to his death in 1984. Indeed, many university leaders involved in the OCW movement have described them as immense data mining opportunities, in terms of the ability of universities to collect information about users. Further, given that the type of knowledge typically conveyed in OCW initiatives is foundationalist in nature, ignoring a large segment of subjects and course materials, especially those offering oppositional forms of narrative knowledge (to borrow again from Lyotard), the notion and range of knowledge advanced by the OCW movement is far from inclusive and, in this sense, is antidemocratic.

THE PROBLEM OF PEDAGOGY

The expansion and upgrade of the Internet in the form of Web 2.0 has made many OCW initiatives possible by enabling users to engage in more active and collaborative forms of learning, such as those epitomized by the notion of “social learning.” Writing for *Educause Review*, John Seely Brown and Richard Adler described social learning as being “based on the premise that our *understanding* of content is socially constructed through conversations about that content and through grounded interactions, especially with others, around problems or actions. The focus is not so much on *what* we are learning but *how* we are learning.”²⁴ The comments here reflect the advancing view among e-learning practitioners that processing knowledge and information is enriched when it occurs within the context of a participatory community. This sort of thinking draws some of its inspiration from the open source and free software movements, sometimes discussed in the singular as the free and open source software (FOSS) movement, wherein software code is seen to be enhanced by opening it up through Internet access to others able to make improvements and pass it along (see *UG*).²⁵ The process and product are seen as belonging to a broad community of participants, often discussed in terms of a growing Internet-based culture of openness.

The reality that countless communities of learners can now form around an endless number of topics and subjects is not to be taken lightly. This indeed has democratic possibilities, and anyone doubting the potential of Internet-based communities need only look as far as the social media-supported movements that helped to unravel antidemocratic regimes as part of the Arab Spring.²⁶

Although incredible advancements have been made in the modalities of Internet-based courseware delivery, such as the creative cognitive tools developed as part of CMU’s OLI, the reality nonetheless is that the vast majority of courseware materials exist mostly in a unidirectional information delivery format. For example, in her discussion of the various teaching formats of OCW initiatives, Walsh highlights the emphasis often placed on audio and video recordings of faculty lectures, describing the Yale online course initiative “as a way to fulfill the knowledge-dissemination portion of its mission while increasing access to the university’s resources” (*UG*, 126). Obviously, such a limited conception of educational format — a recorded faculty lecture — fails to capture the complexity of college and university teaching practices. Walsh alludes to the shortcomings associated with recorded lectures as a form of pedagogy when

24. Brown and Adler, “Minds on Fire,” 18.

25. See also Bonk, *The World Is Open*. The full citation for this work is in note 1, and it will be cited in the text as *WIO* for all subsequent references.

26. Gilad Lotan, Erhardt Graeff, Mike Ananny, Devin Gaffney, Ian Pearce, and Danah Boyd, “The Revolutions Were Tweeted: Information Flows During the 2011 Tunisian and Egyptian Revolutions,” *International Journal of Communication* 5 (2011): 1375–1405; and Seine Tufekci and Christopher Wilson, “Social Media and the Decision to Participate in Political Protest: Observations from Tahrir Square,” *Journal of Communication* 62, no. 2 (2012): 363–379.

she explains that no university expects to be able to capture (through online lectures) the rich educational benefits that come with actively participating in a traditional university community. She goes on to note the exciting array of learning technologies brought to bear on CMU's modest inventory of online courses, but it should be stressed that the development of such courses has been and continues to be immensely expensive, with early courses costing as much as \$1,000,000 to develop and more recently dropping to about \$500,000 per course.

Despite the proliferation of unidirectional courseware content, OCW advocates consistently stress the enriching opportunities offered by Web 2.0 to advance social learning and the ideal of engaged communities of online learners. Few of the most devout OCW advocates support unidirectional teaching and learning. Noteworthy among key OCW works highlighting the social aspects of online learning is Curtis Bonk's *The World Is Open: How Web Technology Is Revolutionizing Education*. Bonk emphasizes the creative potential of online course delivery: "The instructional approaches of choice in online environments are more collaborative, problem based, generative, exploratory, and interactive. There is more emphasis on mentoring, coaching, and guiding learning than in the past" (*WIO*, 33). He goes on to write, "Technology by itself will not empower learners. Innovative pedagogy is required" (*WIO*, 33).

But despite the promotion of more community-oriented forms of learning by OCW advocates, their claims at times betray a naïveté that in the end undermines credibility. For example, in *The World Is Open* Bonk misses numerous opportunities to offer a more critical analysis of educational technologies and innovations associated with the Web of Learning. Building on Thomas Friedman's idea of a world "flattened" by technological advances, Bonk applies such thinking to a broad treatment of Internet-based educational technologies. He posits that "Web technology offers new hope for educating the citizens of this planet. It is the opening up of education that ultimately makes a flatter or more robust economic world possible. In the twenty-first century, education trumps economy as the key card to participation in the world" (*WIO*, 7–8). Later he adds,

Here in the twenty-first century, managerial decision-making is giving way to work teams just as swiftly as teachers lecturing in schools and universities is giving way to self-determined learning, mobile learning, and problem-based curricula. It seems everyone in business is employee-centered while everyone in schools is now learner-centered. The reins of power have indeed shifted. (*WIO*, 39)

This is an interesting take on the state of affairs in education, given that many scholars argue that educational systems — including, most notably for our purposes, colleges and universities — have become more economic-centered, not necessarily more student-centered.²⁷ And with regard to Bonk's point about

27. See, for example, Stanley Aronowitz, *The Knowledge Factory: Dismantling the Corporate University and Creating True Higher Learning* (Boston: Beacon Press, 2000); Derek Bok, *Universities in the Marketplace: The Commercialization of Higher Education* (Princeton, New Jersey: Princeton University Press, 2003); Henry A. Giroux, "Neoliberalism, Corporate Culture, and the Promise of Higher Education: The University as a Democratic Public Sphere," *Harvard Educational Review* 72, no. 4 (2002): 425–464;

the “reins of power” shifting, such a statement is obviously problematic when one considers growing income and wealth disparities, highlighted most pointedly by the Occupy Wall Street movement. Given the relation between power and money in a capitalist-dominated world, such gaps do not bode well for claims of a flattened playing field.

Although the OCW literature often discusses the role of communities of learners and social learning, much of this discussion centers on learners helping others to process information or master particular expressions of knowledge. Rarely is any emphasis placed on developing a critique of the knowledge and information offered. Indeed, in the OCW world, it seems there are only producers and users of information and knowledge. How one comes to be in the position of producer or user or how one’s positioning in life shapes his or her interaction with what counts as information and knowledge seems largely irrelevant. In other words, there is no discussion of how various forces in life come to shape how producers and users are situated relative to what gets defined as meaningful forms of information and knowledge. To bring a more critical point of view to this work, we turn to the work of Freire.

At the heart of Freire’s critique of education, advanced most pointedly in his classic work *Pedagogy of the Oppressed*, is the notion of the banking concept of education.²⁸ Freire described such an educational process as one in which teachers “give” knowledge, mostly in the form of facts and information, to students, much in the manner that one might make a deposit of money into a bank account. Troubling for us is the fact that the discourse relating to the OCW movement often reinforces such a view of education. One obvious example is the very title of a key Organization for Economic Cooperation and Development (OECD) report — *Giving Knowledge for Free* — which, of course, suggests a rather limited and unidirectional view of knowledge, akin to knowledge as information.²⁹ For Freire, the *giving* of knowledge — as in teachers giving knowledge to students — is disempowering in that this version of education fails to take into account the dialogical or social nature of how knowledge is created; hence, meaningful education is more likely to take place when a learner is actively involved in constructing knowledge through a deep engagement with others.

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: Palgrave Macmillan, 2004); Robert A. Rhoads, “The U.S. Research University as a Global Model: Some Fundamental Problems to Consider,” *InterActions* 7, no. 2 (2011), <http://escholarship.org/uc/item/8b91s24r>; Robert A. Rhoads and Katalin Szélenyi, *Global Citizenship and the University: Advancing Social Life and Relations in an Interdependent World* (Stanford, California: Stanford University Press, 2011); Slaughter and Rhoades, *Academic Capitalism and the New Economy*; and Jennifer Washburn, *University Inc.: The Corporate Corruption of Higher Education* (New York: Basic Books, 2005).

28. Paulo Freire, *Pedagogy of the Oppressed*, trans. Myra Bergman Ramos (New York: Continuum, 1970).

29. OECD, *Giving Knowledge for Free: The Emergence of Open Educational Resources* (Paris: OECD Center for Educational Research and Innovation, 2007).

Another key facet of Freire's notion of education relates to the ideal of *conscientization* (a translation of the Portuguese term *conscientização*), which may be understood as a form of critical consciousness about the forces acting to shape one's past and present life experiences. Although his work as an adult educator in Brazil focused on literacy, his pedagogy centered not only on helping people to read texts but also on challenging them to critique the social worlds they inhabit. In particular, Freire was interested in helping students recognize the ways in which power operates to limit their economic, political, and social opportunities; developing such an understanding was part of a liberating process (a form of empowerment) and was central to his work with peasants and workers. This liberatory role of pedagogy became the cornerstone of his educational philosophy.

But for Freire simply understanding the complex ways in which power operates to produce forms of oppression and marginality was insufficient — understanding must go hand in hand with action:

One of the gravest obstacles to the achievement of liberation is that oppressive reality absorbs those within it and thereby acts to submerge ... consciousness. Functionally, oppression is domesticating. To no longer be prey to its force, one must emerge from it and turn upon it. This can be done only by means of the praxis: reflection and action upon the world in order to transform it.³⁰

Thus, the essence of Freire's notion of critical consciousness is captured by the emphasis he placed on the action-reflection cycle. As he explained, action and reflection are in such "radical interaction that if one is sacrificed — even in part — the other immediately suffers."³¹

Beyond concerns related to the obvious tendency to reproduce banking forms of education, there are two basic questions that Freire's work suggests for an analysis of the OCW movement: (1) In what ways do issues of marginality and oppression arise within discussions of the OCW movement? (2) To what degree (and in what manner or form) does a critical action-reflection cycle surface in discussions of the OCW movement and its democratic potential?

Disconcerting for us is the fact that we did not find any serious discussion within the OCW literature about the ways in which the movements might actually serve to challenge forms of inequality and marginality linked to race, class, gender, or sexual orientation. Instead, time and time again readers are instructed to believe that more information will lead to greater levels of democracy. It seems that suffering and marginality are largely the consequence of a lack of information. Make information open and accessible, and such problems will fade into oblivion over time. This promise sounds vaguely familiar. Modernity — captured by the ideals of the Enlightenment and the rise of the scientific method — was supposed to usher in a brave new world free of superstition and irrational prejudice. In this regard, advocates of the OCW movement tend to subscribe to a long-standing

30. Freire, *Pedagogy of the Oppressed*, 36.

31. *Ibid.*, 75.

trope linked to an uncritical view of science and technology; in essence, progress is presented as equivalent to the advance of science and technology. Humanist values that might be used to question and critique such presumptions are absent from much of the conversation (and absent from much of the open courseware as well!). Bringing the pedagogical values of Freire to bear on this version of progress is critical to advancing the OCW movement.

Another interesting point that often arises in the context of the OCW literature is the notion of bias inherent in the kinds of educational technology employed as part of online initiatives. But “bias” here is mostly understood in a functional manner; that is, the technology is in some manner or form slanted toward a particular educational function. For example, Lori Breslow notes,

Our research into the effects of educational technology reaffirms what the media theorist Marshall McLuhan concluded almost 50 years ago: media are not neutral conveyances. They have their own biases, grammars, and limitations. While one particular technology may do some things well, another is best suited to a different set of tasks.³²

This is a rather minimalistic interpretation of media bias (whether speaking of digital media or mass media), completely ignoring the ways in which forms of media actually *produce* news and information in a manner linked to power, typically manifested in the form of capital. Edward Herman and Noam Chomsky’s classic work *Manufacturing Consent: The Political Economy of the Mass Media* comes to mind,³³ but Foucault also articulated the idea that media are necessarily “under the command of economico-political interests” (*PK*, 162).

But OCW initiatives, as forms of media, operate in a different manner than the more traditional notions of media — specifically, the role television, film, and print media play as informational outlets. In the OCW movement, the course-related materials typically offered may be constructed or produced by individual faculty members or in fact anyone interested in putting together some type of course or learning module (with the proper know-how, of course). Based on the idea that anyone can do it, the argument put forth by OCW advocates is that the form of media and information made available through open courseware initiatives is in effect more democratic. Hence, this form of education, as a type of media production, is a more “open” form of information, and presumably, the economic-political interests to which Foucault referred play a less significant role. Herein lies the biggest problem: because OCW is seen to be democratic and open in nature, it becomes extremely difficult to detect the ways in which diverse forms of power — or regimes of power, to borrow again from Foucault — might operate. So, if power now has even greater potential to conceal itself, producing forms of surveillance ever more ubiquitous and omnipresent, then Freire’s work becomes that much more important.

32. Lori Breslow, “Lessons Learned: Findings from MIT Initiatives in Educational Technology (2000–2005),” *Journal of Science Education and Technology* 16, no. 4 (2007): 285.

33. Edward S. Herman and Noam Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media* (New York: Pantheon, 1988).

A second concern arises around the tendency to separate action and reflection and then to focus narrowly on “developing” technologies and innovations to advance OCW work (action) while ignoring the role of theory (interpreted here as part of Freire’s ideal of reflection). Part of the problem is that the OCW movement is driven primarily by practitioners working in the areas of advanced technology and instructional design, sites where social and educational theorizing typically do not play a prominent role. Such a notion is supported by Clint Rogers, Charles Graham, and Clifford Mayes, leading them to suggest that “more exploration is needed by researchers into the complex reality of practitioners.”³⁴ Given the tendency for instructional technology to be divorced from theory, we see the lack of theoretical work relative to the OCW movement as a serious flaw. Separating action and reflection leads to technological advances that go unquestioned or, worse yet, that are presented presumptuously and automatically as forms of progress.

Although there are aspects of the OCW movement that are likely to benefit from a Freirean analysis, it also must be noted that key facets of the movement seem quite aligned with liberatory notions of education. For example, although common forms of OCW course content (for example, recorded lectures, course notes, PowerPoint slides, and so on) suggest a unidirectional perspective on knowledge conveyance and acquisition, emerging and more innovative forms of OCW content stress two elements that seem much more in line with the Freirean ideal of dialogical learning: the idea of open communities of learners and shared conceptions of web-based content. Bonk stresses this when he argues that we are witnessing a cultural sea change in which advancing one’s learning is best served within the context of an open community; along these lines, he discusses “open information communities,” highlighting the ways in which producers and users of open online resources can “become a community of writers, observers, and researchers” (*WIO*, 228). This social aspect of the OCW movement has great potential to serve the forms of democratic pedagogy advocated by Freire, but the types of dialogue in which online learners engage must include a thorough critique of the forms of information and knowledge included in OCW courses.

One might argue that the role of university instructors in such an environment becomes that of facilitator, or guide, who assists in the social construction of knowledge, likely taking place through online social networks. Accordingly, the OECD’s report *Giving Knowledge for Free* suggests that such active and participatory forms of learning involve faculty abandoning the traditional role of “sage on the stage” and instead adopting the position of “guide at the side.” As the report argues, “OER [OCW] is likely to accelerate this process since the role of the teacher as a supplier of teaching material and the only guide to knowledge is also diminishing.”³⁵ Further, the use of volunteer educators, or “online tutors” and

34. Clint Rogers, Charles R. Graham, and Clifford T. Mayes, “Cultural Competence and Instructional Design: Exploration Research into the Delivery of Online Instruction Cross-Culturally,” *Educational Technology Research and Development* 55, no. 2 (2007): 200.

35. OECD, *Giving Knowledge for Free*, 125.

“online mentors,” as Bonk points out, is expanding, increasingly taking the place of the more formalized role of a teacher (*WIO*, 350). Certainly, such a community-oriented notion of teaching and learning holds democratic potential; for example, social movements committed to the expansion of democracy and democratic forms of knowledge might encourage committed members to assume the role of mentor, tutor, or facilitator in online social learning environments. Although certainly evidencing a form of grassroots democracy, this does not necessarily imply that critical questions of power and its deployment will arise.

The OCW literature, while at times advocating forms of social learning and the relevance of social constructivist notions of knowledge, nonetheless falls prey to a fairly limited view of what constitutes a thorough critique of knowledge claims. Indeed, the stress placed on social learning tends to be in the form of assisting other online learners to understand and process information and knowledge, and is much less focused on the very nature of the information and knowledge to be processed. But perhaps most important, at least in terms of advancing the movement’s democratic potential, is a lack of critique of whose interests may in fact be served by various forms of information and knowledge advanced through OCW initiatives.

In essence, in order to advance the democratic potential of the OCW movement, we must recognize the role that critical educators can play in facilitating dialogues centered on power and its net-like operations. And given that professors may or may not be the key facilitators of OCW courses, a broader notion of a grassroots critical pedagogy is needed, one that has the potential to be deployed in online learning environments — a *cyber critical pedagogy* perhaps. Such forms of pedagogy must be able to intersect with the diverse technologies employed as part of online social learning venues. We envision the sort of critical pedagogy advanced by Henry Giroux in his classic work *Theory and Resistance in Education: A Pedagogy for the Opposition* as having relevance in the OCW arena;³⁶ if critical questions about the operations of power can be raised in more traditional face-to-face teaching and learning environments, then we have little reason to believe that such questions cannot also be raised in the context of an online social network of producers and users whose communicative exchanges ideally would confound the divide between producers and users, perhaps raising the possibility for a new conception — that of *prod-users* or, preferably, *critical prod-users*. We see the kind of critical analysis that has been brought to bear on popular culture — including forms of culture depicted and represented through film and television, as evidenced in the work of Giroux and Douglas Kellner³⁷ — to also have much relevance in the context of OCW pedagogical initiatives.

36. Henry A. Giroux, *Theory and Resistance in Education: A Pedagogy for the Opposition* (New York: Bergin and Garvey, 1983).

37. Henry A. Giroux, *Breaking in to the Movies: Film and the Culture of Politics* (Malden, Massachusetts: Blackwell, 2002); Henry A. Giroux, *The Mouse that Roared: Disney and the End of Innocence* (Lanham, Maryland: Rowman and Littlefield, 2010); and Douglas Kellner, *Media Culture: Cultural Studies, Identity, and Politics Between the Modern and the Postmodern* (London: Routledge, 1995).

THE PROBLEM OF HEGEMONY

Our discussion of the problems of epistemology and pedagogy bring to light a third concern relating to the potential for the OCW movement to further strengthen the interests of certain social actors and institutions already in positions of dominance. We call this the problem of hegemony.

Issues of domination arise when one considers who is most likely to be positioned as a producer of OCW initiatives. Who, in essence, has the power to assume positions as producers of OCW content? Once again, we see Foucault's work on power as helpful. Although Foucault maintained that everyone is caught in the same complex apparatus that is power, reflecting to a great extent the characteristics of modernity or late modernity, "Certainly everyone doesn't occupy the same position; certain positions preponderate and permit an effect of supremacy to be produced" (*PK*, 156). Obviously, some individuals and groups have greater opportunities to induce the effects of power through a variety of complex networks and social relations. In today's high-tech information-based societies, access to technology becomes somewhat equivalent with access to power.

The reality is that access to advanced technologies plays a critical role in determining whether or not an individual actor or institution will take the lead in developing open courseware materials having widespread appeal. It is no coincidence that in the United States some of the early institutional leaders in the OCW movement have been Columbia, CMU, Harvard, MIT, and Yale. All of the aforementioned are fairly wealthy private universities; many public universities struggle with identifying the extra resources to invest in the OCW movement (Utah State University may be a notable exception). Economic factors also operate at the level of the individual, wherein people of limited economic means are most likely to be situated as users and not as producers of OCW content. Technology is not cheap; hence, there are economic issues related to class, race, and national status that serve to define one's participation.

A further question linked to the operations of power must be asked: Whose knowledge will reach OCW user audiences? We are led to believe that anyone has the potential to participate in producing courses and course materials. But how does one gain an audience in the worldwide Web of Learning? Certainly, there are OCW-type Horatio Alger stories wherein some relatively unknown person makes a name for him- or herself through the construction of open content. One such example is the case of Kansas State University professor Michael Wesch and his video creation titled, *The Machine Is Us/ing Us*, introduced in 2007. Wesch, a cultural anthropologist, focused on the power of digital text "to describe the exciting world of digital media" and used YouTube to upload a four-and-a-half minute video (*WIO*, 220). Two years later his video had attracted nearly 8 million viewers. Another example is that of Karl Fisch, a high school technology coordinator who in the summer of 2006 put together what was initially a PowerPoint presentation intended for a faculty meeting but that eventually evolved into a YouTube video titled *Did You Know; Shift Happens—Globalization; Information Age*. Fisch's *Did You Know* highlights how technology is changing the landscape of education,

including the preparation of students for the labor market, arguing that “we are preparing students for jobs that do not currently exist and that will require them to be savvy about technologies that have yet to be invented” (WIO, 217). By September 2007, Fisch estimated that more than 10 million people had viewed the presentation; by January 2009, over 4.4 million people had viewed the YouTube version (WIO, 219).

Although the stories of Wesch and Fisch certainly are provocative and compelling, the reality is that when it comes to producing courses and course content, one’s location within the privileged confines of an elite university, such as MIT, Yale, or Carnegie Mellon, surely helps to put one on the radar. In essence, what gets defined as knowledge — or truth, for that matter — in the world of face-to-face encounters or in the world of Internet-based content producers and content users cannot be separated from the ways in which power operates to enable a particular discourse to be advanced. Again, Foucault is helpful:

Truth isn’t outside power, or lacking in power ... it is produced only by virtue of multiple forms of constraint. And it induces regular effects of power. Each society has its regime of truth, its “general politics” of truth; that is, the types of discourse which it accepts and makes function as true. (PK, 131)

Just as regimes of power operate in the face-to-face world to embolden particular versions of knowledge and truth, the same is also true of Internet-based versions of knowledge. Hence, although the OCW movement holds great potential to democratize course-related knowledge and forms of higher education access, a noncritical view of power and knowledge undermines the movement’s potential.

Although OCW advocates certainly emphasize the role of learners as active participants in the use and application of Internet-based knowledge and educational resources, their analyses and discussions could be strengthened considerably by unmasking both the ways in which power (or capital) makes certain forms of knowledge more or less available and how power and money serve to produce certain forms of knowledge in the first place. Examples here include a variety of intricate strategies aimed at search engine optimization (SEO), including pay for placement (PFP), pay for inclusion (PFI), doorway paging, cloaking, blog-pinging (BP), bowling, and linking.³⁸ Another obvious example is the way in which Google may manipulate search engine results to ensure greater visibility of its websites and products; essentially, Google “tips the scales in its favor,” at least according to charges by the European Commission in discussions of a possible antitrust lawsuit against the corporate giant.³⁹

38. Ross A. Malaga, “Worst Practices in Search Engine Optimization,” *Communications of the ACM* 51, no. 12 (2008): 147–150; Melius Weideman, “Ethical Issues on Content Distribution to Digital Consumers via Paid Placement as Opposed to Website Visibility in Search Engine Results,” *Informatics and Design Papers and Reports*, paper 77 (2004), http://dk.cput.ac.za/inf_papers/77.

39. James Kanter and David Streitfeld, “Europe Weighs Antitrust Case Against Google, Urging Search Changes,” *New York Times*, May 12, 2012, <http://www.nytimes.com/2012/05/22/business/global/europe-warns-google-over-antitrust.html?pagewanted=all>.

Another issue relating to power and domination concerns that lack of attention given in the OCW literature to marginalized populations, most notably in terms of their potential unequal access as both producers and users of course content. We find it more than interesting that in reading the OCW literature one rarely finds any mention of marginalized populations, beyond the idea of certain groups having limited access to information and knowledge. A case in point: People within the emerging or developing world are sometimes highlighted as potential benefactors of OCW initiatives, given their limited access to the most advanced forms of university knowledge and research. MIT/LINC (Learning International Network Consortium), as described by Young Park and Franziska Zellweger Moser, is an example of a “community of individuals and organizations focusing on tertiary education in developing countries” with the goal of using open resources to increase access to advanced learning.⁴⁰ Such an initiative is commendable. The problem is that notions of power and knowledge relative to OCW dialogues rarely dig much deeper than a dichotomous discussion of the inequities of access to information and knowledge typically associated with the developed world’s domination over the developing world. Even here, forms of knowledge are not actually questioned; instead, the focus tends to be on how to make knowledge generated in the developed world more available to those in the emerging world. Again, the problem of banking education arises, both in terms of individual producers and users as well as at the level of nation-state (developed versus developing or core versus periphery).

Issues related to the OCW movement and the developing world are of particular interest to us, given the global reach of OCW content and the potential for universities and professors in developed nations to dominate the construction and dissemination of such content. Of course this is problematic, as in fact the OECD’s *Giving Knowledge for Free* highlights:

The vast majority of OER [OCW] are in English and tend to be based on Western culture. This limits the relevance of the materials for non-English, non-Western settings. There is a risk that language barriers and cultural differences may consign less developed countries to the role of consumers of OER [OCW] rather than contributors to the expansion of knowledge.⁴¹

Although the report from the OECD at least acknowledges the potential for the OCW movement to advance forms of domination, OCW advocates tend to be mostly silent about issues of domination. For example, Bonk assumes that as greater numbers of courses (and information in general) are made available, the world “naturally nudges forward as a better and more enlightened place” (*WIO*, xxii). In discussing the potential beneficiaries of a particular type of web-based learning technology, namely massive multiplayer online gaming (MMOG), he

40. Young Park and Franziska Zellweger Moser, “Identifying the Role of the International Consortium ‘MIT/LINC’ in Supporting the Integration of ICT in Higher Education in Emerging Countries,” *Journal of Science Education and Technology* 17, no. 2 (2008): 197.

41. OECD, *Giving Knowledge for Free*, 104–105.

points to the ways in which the U.S. military has found them useful for training, while also highlighting the commissioned paper he wrote about MMOGs for the Department of Defense. Here, we are to presume that advancing MMOG use and understanding within the U.S. military will make the world “a better and more enlightened place” despite much evidence to suggest that U.S. military hegemony is not such a great idea.⁴² And in noting potential challenges to expanding the accessibility of the Web of Learning, Bonk mentions the importance of considering “language and culture,” but in the same breath notes, “As machine translation devices increase in accuracy and usability . . . resources can be quickly converted for those not familiar with your particular language. In addition, they can be modified and adapted by a savvy instructor teaching learners who are younger, older, or less or more experienced” (*WIO*, 30). In this case, cultural differences are presented as something basic enough to be reduced to input data fed to a machine and then refashioned according to the needs of a user audience. Presumably, the machine translation device will be capable of understanding the ways in which power (or capital) operated to produce the various forms of knowledge being translated in the first place. Reading these sorts of passages, one cannot help but wonder if advocates of Web of Learning and OCW ideals see knowledge and information as interchangeable.

The issues discussed in this section raise the possibility that the OCW movement might serve as a vehicle for advancing new forms of domination, including the possibility of furthering new forms of imperialism. Edward Said’s work seems particularly illuminating with regard to the latter issue. More specifically, Said described modern imperialism in terms of “ideological combat,” in which cultural domination replaces military conquest as a principal means of empire building. As he explained, “For reasons that are partly embedded in the imperial experience, the old divisions between the colonizer and colonized have reemerged in what is often referred to as the North-South relationship, which has entailed defensiveness, various kinds of rhetorical and ideological combat.”⁴³ If the vast majority of OCW content derives from the developed world — the Western world, to a great extent — are we to presume that such forms of knowledge and information are not culturally bound in some manner or form? What is to become of local knowledge, as Clifford Geertz might put it,⁴⁴ if knowledge increasingly is

42. Noam Chomsky, “A World Without War,” in *The University, State, and Market: The Political Economy of Globalization in the Americas*, ed. Robert A. Rhoads and Carlos Alberto Torres (Stanford, California: Stanford University Press, 2006), 39–59; Robert A. Rhoads, “The New Militarism, Global Terrorism, and the University: Making Sense of the Assault on Democracy ‘Here, There, Somewhere,’” *InterActions* 3, no. 1 (2007), <http://escholarship.org/uc/item/04166652>; Gore Vidal, *Dreaming War: Blood for Oil and the Cheney-Bush Junta* (New York: Thunder’s Mouth Press, 2002); and Gore Vidal, *Perpetual War for Perpetual Peace: How We Get to Be So Hated* (New York: Thunder’s Mouth Press, 2002).

43. Edward W. Said, *Culture and Imperialism* (New York: Vintage Books, 1993), 17.

44. Clifford Geertz, *Local Knowledge: Further Essays in Interpretive Anthropology* (New York: Basic Books, 1983).

framed in terms of professors and MOOC producers operating from their Western vantage points at mostly privileged institutions such as CMU, Harvard, MIT, and Yale? Obviously, the cultural norms and positions of the most technologically advanced nations are likely to be promoted in such an environment and the form of cultural imperialism described by Said is likely to be strengthened. Accordingly, the dominant economic ideology that has helped to define the contemporary educational reform context is likely to flourish even more, potentially furthering the vast divides that exist now between the rich and the poor, the haves and the have-nots.

DISCUSSION

The OCW movement and related developments such as the growing interest in and expansion of MOOCs has certainly captured the attention of the higher education community. This is most obvious in the extensive coverage by the *Chronicle of Higher Education* and the *New York Times*, but it is also evident in the major funding pouring into OCW initiatives from foundations such as the William and Flora Hewlett Foundation and the Bill and Melinda Gates Foundation. Exactly what is it that is so appealing about OCW in general and MOOCs in particular?

The dominant rhetoric lays claim to the OCW movement as the “opening up” of higher education in the form of broader access; given that MOOCs are free, anyone with an Internet connection and a computer can now take a Stanford or MIT course. Some even suggest that the OCW movement marks a revolutionary transformation of higher education as we know it — from the stagnant so-called brick-and-mortar universities we have long known to flexible online entities capable of rapid adjustments to the marketplace. In this regard, the movement is hailed as a powerful democratic force.

Although the OCW movement holds the potential to expand higher education access, as well as to promote social learning environments in which learners have the opportunity to be active participants in the construction of knowledge (arguably a democratic form of education), and in this sense operates as a democratic force, critical questions must be asked about the nature of the movement and its growing appeal. Otherwise, whatever democratic potential it does hold may be easily minimized or eradicated by a variety of power/knowledge inequities operating in antidemocratic ways. This essay, of course, raises critical questions about the OCW movement with regard to the nature of the knowledge being advanced (the problem of epistemology), the conditions of construction and delivery of information and knowledge (the problem of pedagogy), and the potential for certain social actors, institutions, and nations to dominate courseware development and, in essence, further dominate the advance of knowledge (the problem of hegemony). All of these issues point to antidemocratic facets of the OCW movement — a reality that is almost never addressed in the OCW literature. So what do we make of this more or less one-sided presentation of the OCW movement?

From our vantage point, the OCW movement benefits from the ways in which many of its essential qualities or characteristics align with the dominant economic

ideology of our time, described by many critics as neoliberalism.⁴⁵ Such an ideology applied to higher education reform tends to favor several strategies, including the following: reductions in public support (in the form of tax revenue) for public colleges and universities; reduction in public support for initiatives and programs seeking to address social inequities (for example, affirmative action); increased support (mostly legislatively) for private educational sectors and initiatives (for example, the for-profit postsecondary education industry); increased efforts to marketize and commercialize educational products (for example, courses and programs, university research, university branding, and so on); greater emphasis on accountability, typically defined in terms of simplistic measures of student learning and faculty productivity; the adoption of a business model of management, typically focused on narrowly tailored cost-benefit analyses; and the adoption of corporate-oriented strategies and discourses (for example, university presidents as CEOs).⁴⁶

There are several aspects of the OCW movement that appear consistent with neoliberal educational reform ideals. First, at the heart of the OCW movement is an entrepreneurial spirit driven largely by private investment in the form of foundation monies, excess university revenue (in the case of wealthy universities such as Harvard, MIT, and Yale), and venture capital (for start-up companies such as Udacity). Although most early institutional efforts in the area of OCW and MOOCs are highly subsidized, and many universities venturing into this realm have yet to reap a return from their investment, there is clearly an intent to generate revenue in the future. Early efforts to market courses to large numbers of students at fairly high prices failed (for example, AllLearn and Fathom), but now there is at least some suggestion that a revenue model ultimately will arise. Given the potential for large enrollments in courses offered by highly branded universities such as Harvard, MIT, or Stanford, collecting small fees for accessing courseware, following perhaps an iTunes model, has the potential to generate great revenue. Of course, only the most famous universities are likely to succeed in what amounts to a global competition for online learners: Why take a MOOC from the local state university when one can just as easily enroll in a similar course offered by Harvard or MIT? This aspect of the OCW movement fits nicely with the heavy emphasis of neoliberal reform on privatization, commercialization, and marketization. Furthermore, the competition already arising among big-name universities is also consistent with the survival-of-the-fittest corporate mentality at the heart of neoliberal ideology.

45. Noam Chomsky, *Profit Over People: Neoliberalism and Global Order* (New York: Seven Stories Press, 1999); and Giroux, "Neoliberalism, Corporate Culture, and the Promise of Higher Education."

46. Michael Apple, "Creating Difference: Neo-Liberalism, Neo-Conservatism and the Politics of Educational Reform," *Educational Policy* 18, no. 1 (2004): 12–44; Giroux, "Neoliberalism, Corporate Culture, and the Promise of Higher Education"; Carlos Alberto Torres and Robert A. Rhoads, "Introduction: Globalization and Higher Education in the Americas," in *The University, State, and Market*, ed. Rhoads and Torres, 3–38.

Second, the reality that entrepreneurial innovation in the form of OCW initiatives has the potential to expand access with little or no cost to taxpayers is consistent with neoliberal reformist arguments calling for limited public investment. Indeed, the emergence and expansion of the OCW movement holds the potential to let traditional colleges and universities off the hook so to speak in terms of their responsibility to serve low-income students and further mass higher education. With the OCW movement stepping in to fill the void — one that in part has been driven by a decline in public support for affordable higher education — low-income students can now attend and potentially earn degrees online. Just as the California Master Plan proposed a structure in which the top-tier University of California would be protected from mass enrollment by the state's community colleges, now brick-and-mortar universities can be protected by Udacity, University of the People, EdX, and a host of others that no doubt will emerge in the coming months.

A third aspect of the OCW movement that seems in line with neoliberal reformism is closely tied to the preceding point, but here we focus more on the consequences of low-income students potentially being pushed into the emerging OCW sector. The fact that OCW forms of education may be inferior to traditional higher learning — given the vast array of in-class and out-of-class learning experiences typically associated with a brick-and-mortar college or university — is of little concern in the market-driven world of neoliberalism; students from families having the means to afford traditional higher learning will still be able to reap such benefits, and, of course, the beauty of OCW's contribution is that wealthier families do not have to fund this form of higher education access for those with limited economic means. The announcement that Florida's Board of Governors may create a thirteenth state university (entirely online) to be called "OnlineU" leads us to suspect that the possibility of using this type of "university" to meet demands for "equal access" may not be that far away.⁴⁷ The really good news for the elite private universities, and perhaps some elite public universities as well, is that with the emergence of this new form of accessible higher education, the elites likely will have greater freedom to charge higher and higher tuition, given that they no longer have to maintain a semblance of accessibility.

A fourth aspect of the OCW movement that is consistent with neoliberalism relates to the nature of the courses and the forms of knowledge most likely to be offered as part of the OCW movement. Most of these courses, as we previously noted, are likely to be more representative of fields associated with the hard, natural, and applied sciences. Such courses are unlikely to include course work and materials that might pose a serious threat to dominant groups and dominant ideologies, including neoliberalism. A critical treatment of neoliberal ideology, of course, is more likely to come from courses and course materials associated with

47. Angela Chen, "Florida Ponders Opening an Online-Only Public University," *Chronicle of Higher Education*, September 14, 2012, http://chronicle.com/article/Florida-Ponders-Opening-an-134482/?cid=at&utm_source=at&utm_medium=en.

the humanities and social sciences. The reality that the latter types of courses are not really central to the OCW movement serves to continue the longstanding assault on the humanities and social sciences, and thereby reinforces the strength and hegemony of neoliberalism as an ideology.

CONCLUDING REMARKS

We acknowledge aspects of the OCW movement that encourage greater access to university course materials, and in this sense, we recognize the movement's democratic potential. Additionally, we see the community and social forms of learning made possible by Web 2.0 advances as also having the potential to foster democratic forms of education. We also see the potential good to be derived from the development of a free online baccalaureate at a global level — and one with real substance at that. But the OCW movement's democratic possibilities are restricted by a limited version of what counts as knowledge and a lack of treatment of the role power plays in shaping knowledge. The movement is further limited by a nonempowering view of teaching and learning, one that is overly focused on social learning as a vehicle for helping to process information; it is limited too by a lack of critical analysis of relations of power between courseware producers and users. Finally, the movement is also perilously close to supporting forms of cultural imperialism in which the developing world becomes even more dependent on knowledge and understanding generated by courseware producers operating in the developed world. These are very real limitations that need to be taken seriously if the OCW movement is to be an effective democratic force.

