theories and methodologies

Knowledge Made Cheap: Global Learners and the Logistics of Reading

HANSUN HSIUNG

"YOU ONLY HAVE TO KNOW ONE THING: YOU CAN LEARN ANYTHING. FOR FREE. FOR EVERYONE. FOREVER" (*KHAN ACADEMY*). UTOPIAS OF learning abound in our contemporary media landscape. Take, for instance, the above motto of Khan Academy (#YouCanLearnAnything), one of the earliest providers of open online education. With lessons in over twenty-four languages on topics from algebra to art history, Khan Academy aspires to reach an unprecedented global audience—not only children from the United States who are stuck in "a corrupt or broken [school] system" but also the "young girl in an African village" and the "fisherman's son in New Guinea" (Khan 4). In this sense, Khan Academy enjoys a paradoxical kinship to the diverse geographies studied in this cluster of essays. By promising the global provision of education, it seeks to conquer geography itself.

What form must reading take if education is to conquer geography? We have long associated the reader with the learner, the book with *Bildung*. Yet schemes to make knowledge accessible to disparate learners across uneven geographies betray a fundamental ambivalence at the heart of *Bildung*'s relation to books. They force us to reevaluate the extent to which reading, among our many epistemic tools, is truly the best means of making education "free"—"for everyone," "forever."

Specifically, schemes for global education demonstrate that geographies of reading must also pay sustained attention to the logistics of reading—to the manner in which the act of reading is engineered to produce desired patterns of circulation. Such a logistical perspective provides a useful counterbalance to histories that celebrate books as deterritorializing objects inherently predisposed—much as writing itself is—to slip into unanticipated hands (Rukavina 72; Shep 61). At worst, these histories script the genre of a scholarly picaresque, a happy bibliographical nomadism free of borders. At best, they merely repeat Roger Chartier's observation that the cultural circulation of texts does not map neatly onto preexisting social and political categories (6–8). In both cases, these histories tend to

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PMLA 134.1 (2019), published by the Modern Language Association of America

https://doi.org/10.1632/pmla.2019.134.1.137 Published online by Cambridge University Press

share a problematic assumption: reading is understood as an activity external and posterior to circulation. First, texts move; then local contexts invest them with new strategies of reading. A logistics of reading, in contrast, calls attention to how the project of circulation configures reading as a category internal and subsidiary to its aims. How and what we read—even the very meaning of reading—is conditioned by prior demands that our texts move through and reach certain geographies.

Such a logistics of reading reaches its extreme in schemes for global education. Those who have designed open online courses have all faced—if for some only tacitly—the challenge of adapting materials for constraints of format, file size, browsers, platforms, screen sizes, and bandwidth so as to maximize the course's reach. But MOOCs did not inaugurate the marriage of global education and logistical thinking. Their nuptial roots lie in the middle two quarters of the nineteenth century, when calls for global education fused with a new faith in the circulatory capacity of industrial print technologies.

Elsewhere, I have labeled this period one of "cheap pedagogical print," suggesting a process by which the gap between the early modern philosophical textbook and the how-to manual collapsed into a single bustling world of educational publishing.[1] Though works of cheap pedagogical print have occupied a noted role in studies of the popular and the common reader, extracting these works from the categories of the popular and the common highlights the possibilities obscured by a historiography that all too often conflates the nineteenth-century demotic with the national—for instance, the "British working-class reader" (Rose 48).[2] In particular, I claim that cheap pedagogical print must be understood as an educational project that, instead of stopping at the popular or common, consciously aspired toward a global reach. Cheap pedagogical print thus sought to engineer new means of addressing fundamentally uncommon readers and, in doing so, redefined the relation of knowledge, learning, and reading.

Let us elaborate through examples, drawn from my own research on Britain, China, and Japan. Early modern pedagogical print was not short of bids to teach *sans maître*. But these bids did not form a central part of its identity; pedagogical print continued to be supplementary to the presence of an instructor. "Again and again," writes Anthony Grafton, "publishers, authors and readers of textbooks . . . noted, often with rancor, that the textbook could not provide all of the information or instruct" (29). In contrast, creators of nineteenth-century cheap pedagogical print maintained with increasing adamancy that it would wholly replace living instructors, with titles like *Every Man His Own Teacher* (1834; Preston), *The English Self-Instructor* (1834), and *Die Schule der Chemie* ["The School of Chemistry"] (1854; Stöckhardt). The refrain, echoed almost compulsorily in prefaces and advertisements, was that a good textbook could be understood "without the aid of an instructor" (Horsford xi).

It is with the phrase "without the aid of an instructor" that we start to perceive how cheap pedagogical print exceeded categories of popular and common readers. All books imagine their intended audience, but this audience need not be singular in its composition. Rather, the identities of books emerge as a composite at the intersection of disparate intended audiences. Cheap pedagogical print did admittedly address a stable readership of primarily male students in a presumed national school setting. In the marginal penumbras of this school readership was an extended national audience, "the younger and the more advanced of both sexes" who, without schooling, perused the book at "winter-evening firesides all over the country" (Horsford xi). These audiences were certainly common readers of a sort. But cheap pedagogical print did not stop here. If some books were capable of teaching without instructors, then the

https://doi.org/10.1632/pmla.2019.134.1.137 Published online by Cambridge University Press

ultimate proof of their merit would come in their ability to surpass established borders, successfully re-creating virtual classrooms wherever they roamed. Circulating profusely; teaching across disparate contexts: this was where cheap pedagogical print demonstrated its greatest power. Fully realized, it would instruct the world.

This global consciousness soon began to infiltrate self-representations of cheap pedagogical print, spawning depictions of a medium whose breadth of circulation legitimated its own epistemic claims: cheap pedagogical print really could teach anyone, because copies of it could reach everyone. We find, for example, globes stamped on the covers of books, as in the spelling manual for children in figure 1, where an encyclopedic circle of knowledge is conflated with the geographic extent of globality. Publishers' advertisements boasted that their titles had attained success in "India, the West Indies, and other Colonies," or were "translated into the Chinese Language, and printed at Hong Kong." "The Chinese Edition," one advertisement further added, "also circulates in Japan" (Advertisement). Similarly, readers of *Peter Parley's Universal History*, a staple of British and American schools, found themselves informed that "every now and then, the publishers of this little book which you are now studying, receive an order from far off Japan for two, four, six hundred copies" (Goodrich 113).

References of this sort internal to cheap pedagogical print were further amplified in the wider public sphere, which reported enthusiastically on the travels of cheap pedagogical print to distant locales. From midsummer to autumn in 1867, the *New York Tribune*, the *American Literary Gazette*, and down to the *Milwaukee Daily Sentinel* offered differing accounts of the New York publisher Putnam and Son's exports of textbooks to Japan, estimating orders from two tons of books to "59 cases weighing about 10 tons" ("American School-Books"; "Notes" [15 July 1867]; "Notes" [2 Sept. 1867]; "Schoolmaster").[3] Past the turn of the century, the *Boston Daily Globe* continued to present readers with a glimpse into how "the great school book publishing houses of Great Britain and the United States" had been shipping pedagogical print en masse to China. "The situation is one of the strangest in history," declared the *Globe*: "It has no counterpart in the past, and will probably have none in the future" (Carpenter). Cheap pedagogical print was never only a tale of popular or common

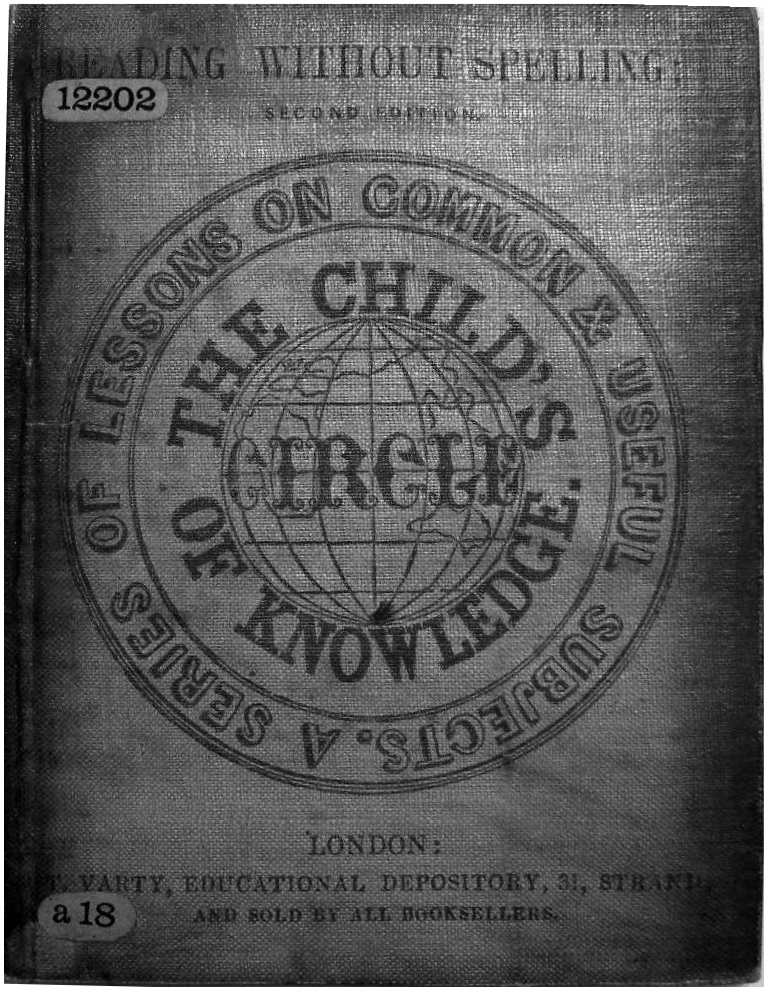


FIG. 1
[Charles Baker], *Reading without Spelling* (2nd ed., Thomas Varty, Educational Depository, [1855]). © The British Library Board.

https://doi.org/10.1632/pmla.2019.134.1.137 Published online by Cambridge University Press

readers but was a tale of the uncommon readers enmeshed in global circulation.

At the core of this fantasia of global circulation lay practical considerations of logistics. How could one engineer the means through which knowledge was delivered so as to place education within the reach of everyone, anywhere? The answer lay in a term we have thus far left unexplored: *cheapness*. For knowledge to be global, it would have to be cheap.

For nineteenth-century commentators, *cheapness* took on multiple senses, the first and most obvious being economic. Embraced broadly by publishers, and most vehemently by groups such as the Society for the Diffusion of Useful Knowledge (1826–46), this notion of cheapness was more than mere market efficiency. It encompassed a whole theory of historical development: "The bent of civilization," as the SDUK asserted, "is to make things cheap" ("Cheap Books"). Print, the argument began, had always had the potential to democratize access to knowledge. For centuries, however, this potential remained untapped; print technology had not developed sufficiently to enable publishers to produce affordably on a mass scale. All this changed with the steam press, machine-made paper, and stereo- and electrotyping. Technological innovation had finally rectified the inequalities of the commercial print market, thereby ending the "monopoly of literature for those who can buy expensive books" ("Reading").

Economic cheapness was paired with another kind of thriftiness: the economization of time. The monopoly on print by the rich was also a monopoly of the leisured, of "the favoured few who . . . devote their days to letters" ("To the Public" [1835]). Time, in this calculation, was equally a real quantity and a psychological perception. Many readers, it was reasoned, naturally avoided books, since their sheer physical size implied a greater time commitment. The solution was condensation: the "great compression" of knowledge into smaller chunks (Beeton v), rendering the "diffuse mass" of knowledge "to a size within [the people's] grasp," as one New York publisher put it ("To the Public" [1833]). This condensation was typically coupled with fragmentation, parceling knowledge into pamphlet series or serialized magazine articles (Smith 3). Those "disinclined to open a book," after all, might still "spare half an hour for the reading of a newspaper" ("Reading").

Attempts to reach diverse readers around the world thus gave rise to the more general model of a reader who not only lacked time and money but also, paradoxically, was disinclined to read at all. The irony was cruel. Cheap pedagogical print promised to harness industrial technologies in harmony with commercial publishing to produce a new kind of book—a book cheap enough and short enough to travel anywhere and teach anyone. But maximizing the extent of both *anyone* and *anywhere* required compressing and pulverizing knowledge; after all, one could "hardly expect . . . to turn the attention of the million, in any great degree, to the perusal of books"—one could hope only to turn it to the quick digestion of fragmented snippets ("To the Public" [1833]). Put differently, the logistical possibility for the globalization of cheap pedagogical print militated for neither intensive nor extensive reading. It militated for nonreading.

The challenge posed to reading by cheap pedagogical print therefore drove deeper than contemporaneous genres of compression and fragmentation such as the literary anthology. Anthologies, too, often had global ambitions, positioned as a medium for the flow of English letters "from the Thames to the Ganges" (Vicesimus Knox qtd. in Price 73). Nevertheless, the literary anthology remained at its core an encouragement of reading. A carefully selected passage was worthy of slow rumination, of scrutiny and admiration. While anthologies might make reading more efficient, they never sought to question reading's intrinsic worth as a source of delight and pleasure.

https://doi.org/10.1632/pmla.2019.134.1.137 Published online by Cambridge University Press

Cheap pedagogical print's encouragement of learning was more radical. It brought to the surface a buried antagonism toward reading as a messy, inefficient means of acquiring knowledge. Indeed, there has long been a dream on the part of both learners and the learned that fantasizes of reading's demise. Jonathan Swift satirized it already in *A Tale of a Tub*, writing of dissolving books into an elixir for nasal inhalation to bypass "the Fatigue of Reading" (103). In 1947, at the dawn of the computer age, Morris Bishop speculated about a "reading machine" that would allow students to devour "a bibliography of fifty books . . . comfortably in a weekend." These playful musings find a humorless echo today in the panoply of apps for reducing our reading burden: *Blinkist*, for instance, whose motto—"Never stop learning"—markets a service that distills "the world's best nonfiction . . . into key insight summaries you can read in 15 minutes"; or *Instaread*, which promises extracts for those who "want to read a book but don't have the time." Science fiction futures, meanwhile, long for instantaneous transmission of knowledge downloaded directly into our brains. Recall Keanu Reeves's stunned awe in *The Matrix*: "I know kung fu!" Education's professed love for reading reveals itself in practice to be grudging toleration. Could we but learn without reading, we would.

Uncommon global learners struggled with this tension, and it is with a vignette from one of their lives that I close. In 1865, the Japanese scholar and shogunal adviser Koga Kin'ichirō (1816–84) set himself the task of "know[ing] the prosperity of the Western arts and sciences" (7: 52a).[4] His method of choice: cheap pedagogical print, specifically Dutch translations of the SDUK's *Penny Magazine*. Over the course of his reading, he encountered an article paying tribute to new printing technologies and their impact on the democratization of knowledge. In his diary, Koga registered a mixture of shock and admiration, noting particularly the magnitude of William Clowes's London enterprise. Ultimately, however, Koga remained skeptical. The proliferation of cheap print only deferred a deeper problem: namely, that "people in general do not devote themselves to reading." "Fast printing machines," Koga concluded, "are therefore not an urgent task for our country. We should make our urgent task the production of talented readers" (3: 31b).[5]

On the one hand, the very presence of Koga's words testifies indirectly to the power of global access. Works like the SDUK's *Penny Magazine*, made precisely for those who, instead of "devot[ing] themselves to reading," sought materials "that may be taken up and laid down without requiring any considerable effort," became a vital resource for learners like Koga who hoped to gain knowledge of the West from a distance and with limited linguistic skills ("Reading"). Already by the late 1830s, the medical scholar Koseki San'ei (1787–1839) had observed that Western countries "produce cheap and easy-to-understand books on all arts and sciences, giving them to impoverished scholars" (396).[6] Three decades later, Koga's colleague Yanagawa Shunsan (1832–70) praised the abundance of cheap, simple books in European languages. With them, "even in the remotest of lands and the most isolated of villages, self-study is no longer difficult" (19b).[7]

But, on the other hand, does easy global access to knowledge produce "talented readers"? Koga thought not. The character I translate here as "devote" (*shi* 事) means not only to work hard at or concentrate on an activity but also to serve a master. Devotion to reading as a type of servitude therefore inverts the logistical assumption that reading is just one of many means for delivering knowledge to learners. Instead, reading must be served as an end in itself.

Such autotelic reading stands in ambiguous relation to schemes for global education as we know them. Pressed for time and

https://doi.org/10.1632/pmla.2019.134.1.137 Published online by Cambridge University Press

money, the "young girl in an African village" and the "fisherman's son in New Guinea" need a means to learn quickly and cheaply—a task for which reading, if we are to truly serve it, is not particularly adapted. Bishop suggestively alluded to the root of this strained affair between education and reading in his story of 1947. There, before a crowd of university faculty members, a professor declares: "The greatest waste of our civilization is the time spent in reading. We have been able to speed up practically everything [to] fit the modern tempo—communication, transportation, calculation. But today a man takes just as long to read a book as Dante did." The choice of counterexamples is telling. Communication, transportation, and calculation constitute logistical systems for coordinating global differences, for collapsing uneven geographies. If education is to follow these systems in carving a path around the world, Bishop implies, it must overcome the "waste" of reading.

The experience of this waste should be familiar. Rather than utopias of learning, it recalls nightmares of interpretation. Hours with a text still leave us with errors and misunderstandings; more often than not, after reading deeply, we emerge with greater uncertainty as to what we have really learned. If, then, we are to champion the primacy of reading as a means of education, we must be clear about its tensions with—and indeed, at times, antagonism toward—values of knowledge circulation. For underlying the seemingly democratic virtue of circulation is a history of how logistical systems, engineered to make knowledge ever more mobile, have not only transformed but all too often impoverished the act of reading. Hefty tomes crammed with dense prose—with all their time cost, all their aporia and irresolution—may not in the end enable us, as Khan Academy would have it, to learn anything, for free, for everyone, forever. Yet our constant struggles and failures to make sense of texts suggest that reading, so otherwise apparently wasteful, is meant to teach us another lesson. This lesson—and not the untrammeled circulation of texts—is perhaps the true reason to celebrate an education through books. Faced with a book, you only have to learn one thing: you will never know everything.

Notes

1. See Hsiung, especially the introduction.

2. In particular, see Altick; Lyons; Webb 13–35.

3. For a summary of these transactions from George Palmer Putnam's perspective, see Greenspan 438–40.

4. 「知西人術藝之盛大」. All translations from the Japanese are mine. Pages in Koga's manuscript diary are unevenly foliated; I have cited according to the following format: volume: leaf a/b.

5. 「人亦不事読書・・・故印書速机、非我邦攸急、以造読書人物為急」

6. 「価廉にして且つ捷径了解し易き諸学芸の書を著して貧士に与へ」

7. 「今ハ遠国僻邑ニテモ独学ヲナスニ難カラズ」

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