

T W E L V E

All Children Reading

In 2015, United Nations delegates set an ambitious goal: by 2030, all children should enjoy a quality primary and secondary education leading to effective learning. To achieve this goal, however, the early reading materials necessary to support literacy development must be in place. The expert consensus is that children should learn to read in their mother tongue; they must understand spoken language before they can learn to read. SIL International tracks more than 7,000 living languages, of which more than 564 are currently in use in primary education. Unfortunately, early literacy materials are inadequate or absent in most of these languages. This creates a situation of extreme book hunger for approximately one billion children.

How many new titles are needed to fill this gap? Children might do with as few as fifty books in their first year of reading. As they begin to develop fluency, however, many more titles are needed. By my estimate, a thousand picture books in each language is an appropriate target for a minimally adequate supply of children's literature to achieve reading fluency. (This is also Room to Read's target figure for stocking a school library.) Approximately 500 neglected languages are currently used in primary education, which generates a total of more than 500,000 new titles needed. Existing efforts by nonprofit publishers have so far created several hundred quality picture books. Perhaps half of these were openly licensed, resulting in several thousand additional translations; less than 1 percent of the need. Clearly, a dramatically more efficient approach to title development is needed.

This chapter sketches out a vision for how existing actors and new partners can meet the global need for multilingual children's literature within a decade. This strategy begins with mass translation of existing children's books, enabled by one or more of the copyright solutions detailed in the previous chapters: permissions, fair use, exceptions, and open licensing. Once the titles are translated, a second challenge remains: expanding distribution strategies so that a billion children can get their hands on

these books. Here, it will be essential to take full advantage of both digital and print formats, through both non-profit and commercial distribution venues.

Mass Translation

To reach global scale, nonprofit publishing must fully leverage existing resources. There is no shortage of gorgeously illustrated children's titles. In English alone, more than 50,000 picture books are in print. Not all of these titles are culturally appropriate for use in developing countries, but a minority are—well more than the one thousand needed for an adequate children's literature. The problem is simply that these are being published in too few languages. Translation is the most direct, cost-effective, and rapid solution to this problem.

Although automatic machine translation is now very advanced for a few languages, translations into neglected languages still rely on human labor. Pratham Books reports paying around fifty dollars per translation through a partnership with Translators Without Borders. At this low rate, 500,000 paid translations would cost around \$25 million. Additional strategies can lower this cost even further. A single translation can be adapted to serve one or more lower reading levels much more easily than translating a new story from scratch. Once a 1,500-word

story is translated, a 750-word and a 250-word version can be created easily by simplifying the text. Additionally, a good starting point would be to translate into just one hundred languages; this would be sufficient to serve 80 percent of all children. Local volunteers could continue the work of translating books from any of the initial one hundred languages into the lesser-spoken ones. Combining these techniques would reduce the cost to under \$1.5 million.

Moving past the first hundred languages to smaller and smaller language communities, it becomes less and less practical to pay for translations, even on a discounted basis. Crowdsourced translation can pick up where paid translation leaves off. Pratham Books, African Storybook Project, and SIL International have all developed online platforms to help ordinary community members translate storybooks. Because user-friendly software already exists, the true challenge is mobilizing enough people to use it. Language development organizations and teacher education programs might provide the necessary infrastructure to develop a critical mass of amateur translators. Facebook might also provide an effective means of targeting users in specific language communities to recruit them as online volunteer translators.

Selection Criteria

Most American stories are not ideal for global use, but a minority are. Stories starring animal characters, both traditional tales such as *Aesop's Fables* and modern ones like *The Gruffalo*, work in any region of the world. Science and nature titles also travel well. The visually spectacular animals in *What Do You Do with a Tail Like That?* by Steve Jenkins need not be locally familiar in order to delight a child. Culturally specific titles can also work globally, and serve to represent the world's diversity. *Imani's Moon*, *Manjhi Moves a Mountain*, and *Drum Dream Girl* are set in Kenya, India, and Cuba, respectively; but all are easy for any child to relate to. Folk tales such as Tomi dePaola's *Strega Nona* and *The Legend of the Blue Bonnet* also travel well.

I conducted a sampling of English-language picture books to see what percentage of existing titles might be appropriate for global use. I focused on the four categories of books most likely to travel well: science and nature titles, animal stories, folk tales, and multicultural books. Within each category, I sampled one hundred titles to see how many met the following selection criteria for mass translation: 1) an engaging story or concept, 2) high-quality illustrations, and 3) the illustrated characters and settings are not specific to an affluent, white, or Western

demographic. My survey confirmed that at least 7,000 good candidates for mass translation exist: more than 500 folk tales, 750 multicultural titles, 1,000 science and nature titles, and more than 5,000 stories featuring animal characters. This is far more than the number needed.

Even a few hundred stories, adapted to different reading levels, could serve as the backbone of a global children's literature for billions of readers. Given this, quality standards should be particularly high. The effort should prioritize delightful titles with gorgeous illustrations. Children should be excited to read these stories over and over. Attention should also be paid to the ethical messages they communicate. In all cultures, stories are used to cultivate ethical values in the next generation. Kindness, generosity, bravery, hard work, studiousness, and service to others are virtues valued in all cultures. The United Nations' Sustainable Development Goals also specifically call for education to promote nonviolence, gender equality, global citizenship, sustainable lifestyles, human rights, and respect for cultural diversity. A new global canon of children's literature should subtly promote these international values.

Clearing Rights for Translation

Commercial publishers have repeatedly demonstrated their willingness to grant free permissions for nonprofit

purposes. Unfortunately, it is incredibly inefficient for publishers to award charitable licenses on a one-off basis. As detailed in the previous chapters, this problem has been overcome in other contexts through reliance on blanket permissions, fair use, specific copyright exceptions, and Creative Commons licenses.

The simplest approach would be for publishers to donate translation rights in a coordinated way. In a single contract, a commercial publisher could authorize translations for a dozen or a hundred books into thousands of neglected languages. The global need for source material could be met with as few as 250 titles. Each one could then be adapted into multiple reading levels to meet the goal of 1,000 translated titles per language. Obtaining rights to at least 500 titles would be desirable to ensure greater variety and options. Even at this higher level, any of the Big Five trade publishers could meet the global need single-handedly.

Through the permissions approach, publishers would provide the digital book files, eliminating the need for scanning and software manipulation to remove text from the images. Publishers could also contribute expertise and visibility to advance the project. If publishers are slow to grant permissions for whatever reason, the effort can fall back on fair use, though this entails legal risks that

must be carefully managed. New copyright exceptions would provide the strongest basis for efficiently clearing rights. A fourth alternative is for foundations to commission new titles, or purchase rights to existing ones, and place them on Creative Commons licenses. It is not strictly necessary to choose between these four strategies; all can be pursued in tandem.

Funding Translation

One way to fund translation efforts is through foundation grants. Another is to shift resources currently spent developing early-grade textbooks. Although storybooks and textbooks are complementary, the dominant approach has been for national governments and international aid agencies to invest funds in textbook development, to the neglect of storybooks. The problem is that students with access to textbooks but not storybooks rarely become proficient readers.

It is quite possible, however, to teach reading without a textbook. In this approach, each student chooses a story from which to practice reading. The teacher provides group instruction in letter recognition, phonics, and other decoding strategies. The students practice reading for pleasure every day, either individually or in pairs. The storybook approach to reading instruction has several peda-

gological advantages. Ample research shows that students' motivation to read is higher when they are able to choose the book themselves. Picture books also allow students to select a book at a "just right" level of difficulty and to learn at their own pace. In contrast, students practicing reading from a textbook that is either too advanced or too basic for their individual skill level are not actually improving. For these reasons, many educators consider the storybook-focused approach to reading instruction superior to the traditional textbook method.

A storybook approach to teaching reading would also help address the unique challenges of multilingual classrooms. A typical teacher in urban Nairobi will have students whose families speak Swahili, Kikuya, Luhya, and Luo. Educators there will teach from an English or Swahili textbook, verbally translating into the other languages as best they can. With the storybook approach, however, the children can each read in their own language. Students can be paired or grouped by the language of choice to take turns practicing reading to each other. Common instruction would still be given in phonics and other decoding strategies applicable in any language. If the same title is available in multiple languages and levels, teachers can also lead shared activities related to the book's themes while each child reads the edition best suited to them.

From Development to Distribution

After translation, the hard work of distribution begins. Perhaps the best precedent for such an immense effort would be universal vaccination campaigns. Several differences, however, make books even more challenging to distribute. Whereas the same vaccine works for every child, half a million different titles must be made available, with the right book, in the right language, going to the right child. Additionally, each child needs to be vaccinated only once or twice in a lifetime, but children need regular access to books for many years. Once a coordinated vaccination campaign is completed, the disease is eradicated and efforts can cease. Printed books, however, fall apart and must continually be replaced.

Digital distribution is critical to overcoming these challenges. Half a million options can be stored in the cloud, to be conveniently searched and accessed anywhere in the world. Every family with a smartphone can possess an extensive home library. Digital books also do not fall apart and never need to be replaced. For these reasons, digital distribution is a necessary part of any strategy that hopes to someday declare book hunger to be eradicated; necessary, but not sufficient. Like any business intent on promoting higher consumption of its goods, we must seek to distribute in as many formats as

possible, through as many channels as possible. Print distribution is also essential, and commercial distribution strategies can serve as a powerful complement to non-profit ones.

Digital Strategies

Not every family in the world has a smartphone and a data plan, but nearly every teacher does. Leveraging these existing resources is a cost-effective way to reach most school-age children. Even in very poor countries, school technology resources often permit children to read digital books from phones, tablets, or a projector. Teachers can also distribute book files for children to read at home on the family phone.

Digital distribution does not necessarily require a data plan or even Internet access. In India, some Pratham Books users copy book files onto mobile phone memory cards costing less than a dollar, using these to transfer stories from one phone to another, either locally or across long distances. Mobile memory cards can also be distributed at education conferences, alongside textbook distribution, in marketplaces and on street corners. As digital devices continue to become more powerful and less expensive, the capabilities of digital distribution will further increase.

Several digital library software platforms appropriate for use in developing countries already exist. Nabu.org, formerly known as Library for All, runs one of the best. Pratham Books, African Storybook Project, and the Global Book Alliance also offer attractive digital libraries focused on openly licensed stories. Worldreader currently serves more than a million readers in developing countries through its mobile app, and is capable of scaling to serve many times more.

The primary factor limiting digital distribution is neither hardware nor software, but awareness. However wonderful a resource, people cannot use it if they do not know it exists. National and state education departments will be an essential partner in making sure teachers know where to access free digital books. Developing-country governments routinely run public awareness campaigns through posters and radio, which could emphasize reading and explain how to access content. Facebook could be particularly effective for spreading multilingual storybooks, because its users are networked with others who speak the same language. Given the high demand for multilingual content, cell phone companies might also be interested enough to preinstall a reading app and zero-rate storybook downloads as a selling point. Every printed copy of a book can also serve as an advertisement for the online resources.

Print Strategies

Print strategies are no less important than digital ones. The primary way that less-well-off children access books in the United States is through their classrooms and school libraries. This will also be essential to reaching children in developing countries. In some countries, textbook distribution is highly efficient; printed storybooks could be distributed in the same way. In other countries, textbooks too often go missing as a result of corruption and theft. Either way, it would be a mistake to rely on schools as the only distribution route.

Getting print books into children's homes should be a top priority. Extensive research shows that book ownership has a powerful impact on reading, educational achievement, and future income. Imagination Library is already working on adapting its direct-to-home distribution model for countries without reliable postal systems. In Belize, the organization sends a shipping container of books every three months, then distributes the copies monthly through churches. Another approach to targeting vulnerable households could be to incorporate book distribution and shared reading into home visits by community health workers.

A variety of print formats should be used. Nonprofit publishers generally favor paperback binding, which is

cheaper both to print and to ship on a per-copy basis. Hardcover printing may be more economical in the long run, however, and should not be ruled out without a careful cost-benefit analysis. An even more durable material is the polyethylene fabric popularized by Indestructibles books. Their light weight and slim profile allow them to ship as cheaply as paperbacks, but they are even more durable than hardcover books. Yet another approach is to distribute storybooks on magazine paper, inside newspapers of the same language. Such fragile books would not survive much handling, but they would be incredibly cheap to print and distribute.

The primary challenge of print distribution is the complexity of supplying so many different versions in highly multilingual environments. The best solution to this problem lies in the strategy of mass customization. This approach waits until the last step in a supply chain to customize the product for each consumer. For example, wine bottles are sold in very few sizes and styles. Only once each batch of wine is prepared does a vineyard customize its bottles with a label unique to each wine. Apple's global smartphone distribution system provides a second example. Consumers can choose a variety of memory capacities and case colors, but each phone is fully assembled only once a particular order is paid for. Customizing

products at the last step in the supply chain avoids the need to stockpile all possible combinations.

Similarly, a book distributor could warehouse two hundred titles with no text printed on the pages. Once a certain title, in a certain language, at a certain reading level is ordered, clear adhesive labels could be printed with the appropriate text. These labels could be affixed to each page by local employees with the relevant language skills. Alternatively, a school or library might take delivery of empty books with blank sticker sheets, to do their own printing and attaching. Through a global canon approach, the benefits of mass customization could extend worldwide. A limited selection of titles would be produced in huge quantities, allowing for economies of scale in printing and shipping. A few hundred titles could be customized into millions of unique versions to serve every language and level.

Cost Recovery

Digital books can be shared for free, but when it comes to print distribution, cost-recovery strategies are key. No nonprofit raises enough money to give away billions of books as hard copies. To fund such extensive production and distribution efforts, it will be essential to leverage the ability and willingness of many families, schools, and

nonprofits to purchase books, when the prices are set as low as possible. First Book has had great success with this model in the United States. In some countries, however, the law prohibits nonprofit organizations from selling goods.

An easier approach might be to eliminate taxes on sales of books in neglected languages. This would avoid the need for small mission-driven publishers and book dealers to legally organize as not-for-profit charities. If profit is not prohibited, additional methods of sustainable print distribution may emerge. Tiny shops could stock books in local languages. Neighborhood microentrepreneurs could open up book rental services from their home. Churches and other trusted community organizations might collect orders from families where postal delivery would be too expensive, perhaps as an institutional fundraiser. Peddlers might sell books on city sidewalks, in marketplaces, and door-to-door. Countries could still collect tax on commercial trade in books in English, French, and other profitable languages.

Enabling market-based print distribution requires special care for the method of clearing rights. Publishers donating rights in neglected languages should not insist on nonprofit distribution methods only. Many small mission-driven organizations in developing countries

organize as for-profit companies, even though they make little or no profit. Authors and nonprofits choosing open licenses to maximize the impact of their titles should avoid terms prohibiting commercial use. Fair use rulings and statutory copyright exceptions should be careful to provide room for low-cost distribution of translated materials. Markets fail miserably at creating mother-tongue reading material, but they excel at inexpensively producing and moving physical goods in an open and competitive environment. This strength should be leveraged.

A Book in Every Hand

Music and cuisine are everywhere the product of cultural exchange and localization. This can become true of children's literature as well. Utilizing a global canon and mass translation strategy, we can realistically create an adequate book supply for 95 percent of the world's children within a few years. Time is of the essence—and not just to reach the 2030 goal of all children learning well. A strategy that takes another decade longer will come too late for hundreds of millions of children. The first key to this approach is solving the copyright licensing dilemma. Blanket licensing, fair use, copyright exceptions, and open licensing all hold the potential to unlock existing resources. Once translation is accomplished, digital

distribution scales up rapidly and inexpensively. Developing an effective ecosystem for print distribution is likely to require greater time.

In the twentieth century, coordinated partnerships of charity, volunteers, government, and industry successfully eradicated smallpox and polio. Similar partnerships will be critical to the campaign to end book hunger. If we succeed, the effects will be transformative for one billion children now in school and for their communities. My own expertise is in copyright law, but you have other unique skills. To further explore how you can put them to use to advance this important cause, I invite you to visit www.bookhunger.org and to continue the conversation with #bookhunger.