## Same language subtitling as a driver of literacy



YES, BUT... SANDEEP GOYAL

first met Prof Brij Kothari some time at the end of last year. The Indian Institutes of Technology and Cornell educated don teaches at Stanford and Indian Institute of Management, Ahmedabad. Brij is a tireless champion of Same Language Subtitling (SLS), one of the world's largest reading literacy interventions, and runs Billion Readers (BIRD), an initiative to accelerate literacy at less than ₹1 per person per year. I was both intrigued, and honestly somewhat confounded by what Brij had to say.

The BIRD initiative aims to ensure daily and lifelong reading practice for a billion people in India, with a strong focus on reaching girls and women. This seemingly impossible goal can be achieved by scaling up SLS at quality on popular video-based content on TV, streaming and digital platforms. SLS is

the idea of subtitling audio-visual (AV) audio-visual content that is interesting to chilcontent in the "same" language as the audio. What you hear is what you read. SLS suggests Hindi subtitles on Hindi content, Tamil subtitles on Tamil content and likewise on all popularly watched entertainment (for example, films, serials and cartoons) and educational content can vastly improve reading abilities amongst neo-literates.

India's literacy rate is 78 per cent (NSS 2018) but the quality of literacy is extremely low. Sixty per cent "literates" cannot read simple texts. much less a newspaper. Children fall behind in reading from the early grades and weak reading skills erode further later in life due to a lack of reading practice. The nation, and practically every Indian state, confronts weakreading at scale. Brii's hypothesis is simple. A billion TV viewers in India, including 600 million weak readers, watch on average four hours of TV every day. A national SLS scale up could create a pathway for all TV-viewing weak readers to become functional and fluent readers, with no additional time, cost, or effort. The number of target beneficiaries arguably could make SLS one of the world's largest reading literacy interventions. And at what cost? Less than ₹1 per person per year!

SLS rides content that is by definition interesting to the viewer. This is a critical point. Studies at Massachusetts Institute of Technology in the field of cognitive neurosciences explain how emotion and motivation of SLS ranges from fair to poor (for example, "propel learning very powerfully." SLS of unreadable fonts).

dren fires a steady stream of consistent grapheme-phoneme associations in the brain that already knows the language and letter-sound correspondence. In the case of popular songs, nursery rhymes and repeatedly watched cartoons there is the additional advantage of predictable text. The visual and auditory pathways involved in reading are strengthened gradually, subconsciously and, incidentally, as a by-product of watching content that the child has an inherent motivation to watch anyway. Brij says the same language subtitles read "reading" a few books every year.

Brij has over the years met Bill Clinton, Boris Johnson, Narendra Modi, Gordon Brown, and other prominent leaders and got them to endorse the potential of SLS.

As a result of Brij's untiring efforts, India is the first country pursuing a scale up of SLS on mainstream entertainment and educational content for reading literacy. After two decades of evidence-based-policymaking, SLS became a part of the Ministry of Information and Broadcasting's (MIB's) Accessibility Standards under the Rights of Persons with Disabilities Act, 2016. Half the entertainment content on TV, in every language, state, and channel, is required to carry SLS by 2025. A number of TV channels have begun implementing MIB's Accessibility Standards but the current quality

Brij's formula is actually quite simple: Switch on TV, switch on learning. The professor emphasises that regular SLS exposure at home on TV, over 2-3 years, can literally double the number of good readers. This is enormously significant in a country where annual surveys have consistently found that half the rural children in Class 5 cannot read a Class 2 level text (ASER 2018).

In wishful thinking mode, Brij points to the fact that India produces 1,500 films every year. If video = audio + visuals is redefined as video = audio + visuals + text, where "text" through TV watching alone could be equal to is SLS, then the entire challenge could be solved at root. All entertainment and educational content needs only to be subtitled once. The time-coded SLS scripts can be an integral part of video. Open source technology can then allow channels and distributors to seamlessly recombine A+V+T flexibly, as per their design preferences. But this requires government support and co-operation from the entertainment industry. Progress, at best, is tepid; obstructions and nay-sayers abound.

Prof Brij Kothari's SLS is unselfish. It is a simple home-spun solution for a billion Indians to read better. It is low on tech. It is low on cost. It is high on impact. And, it has an unbelievable return on investment. Work such as Brij's deserves a Nobel. One day, maybe soon, he will win one.

The writer is Managing Director of Rediffusion