

LETTER TO THE EDITOR

To the Editor:

Commenting on: Ms. Rachel E. Rosenbaum's November 21, 2000 letter to the editor regarding Dr. Bruce Blasch's Guest Editorial "Low Vision and Blindness," pp. vii-x, Volume 36, November 4, October 1999.

Ms. Rachel E. Rosenbaum, President of the Carroll Center for the Blind, and I are very much in agreement on the pivotal contributions of Father Thomas J. Carroll and Dr. Richard Hoover as "key pioneers" in the rehabilitation of blind persons, as she describes in her "Letter to the Editor" in the *Journal of Rehabilitation Research and Development*, Volume 37, Number 6, November/December 2000.

As its founder at MIT I also appreciate her mentioning the Sensory Aids Evaluation and Development Center (SAEDC; reference 1). While SAEDC did make *de novo* and still effective contributions to Braille translation and embossing by computer, to electronic travel aids and other devices for blind and deaf-blind persons(2), its staff did not conduct the "pioneering work" which "ultimately led to the Kurzweil reader and the Speech software used by TSI."

As I said in my Volume 37, Number 2 March/April 2000 "Letter to the Editor," John Kenneth Dupress, described in that letter and later Director of SAEDC, "recruited me (and MIT) into blindness-related research." The "(and MIT)" in this case was Professor Samuel J. Mason of the MIT Electrical Engineering and Computer Science Department. In the Research Laboratory of Electronics (RLE), Professor Mason formed a team with two more junior professorial colleagues in his department, Donald E. Troxel, who researched an optical character reader (OCR), and Francis F. Lee, who studied synthesizing speech as computer output. The result was the RLE Reading Machine for the Blind (3).

Mr. Raymond C. Kurzweil was a student at MIT during the period of R&D of the RLE Reader; he received his bachelor's degree from MIT in 1970. The Kurzweil Reader he later marketed had a somewhat different OCR and used a commercial speech synthesizer.

The "Speech software used by TSI" (Telesensory Systems, Inc.) had its origins in Professor Lee's research with significant advances at MIT by Professor Jonathan Allen, who became Director of RLE. Dr. James C. Bliss, who did his doctoral research at MIT with Professor Mason, founded TSI. Under Dr. Bliss's leadership TSI produced many novel and effective communication devices for blind persons, perhaps most notably the OPTACON (Optical to Tactile portable reading aid), also described in reference 2.

The decade of the 1960s was an especially productive period of rehabilitation device R&D.

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REFERENCES

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2. Mann Robert W. Technology and human rehabilitation: prostheses for sensory rehabilitation and/or sensory substitution. Adv Biomed Eng; New York: Academic Press; 1974;4:209-353.
3. Mason SJ, Lee FF, Troxel DE. Reading machine for the Blind. Quart Progress Report No 80. Research Laboratory of Electronics, MIT, Cambridge, MA; 1968; p. 245-8.