

A scientifically playful excursion into language – remembering Wally Feurzeig

The roots of the Logo project (and so indirectly of Constructionism) were planted at Bolt, Beranek and Newman, Inc., in their Educational Technology Department, founded by Wally Feurzeig in 1965. He was among the first to suggest that children *program* computers, not merely take lessons from them. After an initial experiment using one of the numeric computation languages most common in those days, he had the idea of a language in which *language* would be the data — hence the name Logo, from the Greek word λόγος for “word or form which expresses a thought, also the thought itself.” Logo inherited many ideas from Lisp, but it specialized the list data type to focus on words and sentences, so that a sentence is made up of words, rather than directly made of characters as in most languages even today. In Wally’s words *Logo was designed very specifically to be a powerfully expressive yet readily accessible language for construction, exploration, and investigation of ideas and processes in math, science, language, and music – to give children a lively learning environment.*

Later, Seymour Papert’s invention of turtle graphics became the most popular Logo domain, to the point that many people are unaware that Logo does anything else. But Wally never lost interest in the original idea of exploring language. About 20 years after the beginning of Logo, he collaborated with Paul Goldenberg on *Exploring Language with Logo* (MIT Press, 1987). The book could be described as *a scientifically playful excursion* into natural languages. It uses the central notion of *grammar* to speak about language as an appealing environment for conjecture and experimenting at every level from the structure of a poem to the spelling and pronunciation of syllables.

Wally’s contributions to education also include expert system-based tutors and an early visual language based on composition of functions. The visual representations in his Function Machines significantly aid the understanding of key computational concepts such as function, iteration, recursion by making the operation of algorithms transparent.

Wally’s love for science, music, art, education and life, in general, together with his gentle spirit, is what endures in the memory of everyone who knew him.

At this panel friends and followers of his vision for education are welcome to share their memories and personal stories about Wally, including his favorite jokes.

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TO GLADGLAD
  OUTPUT SE [WE ARE GLAD]~
  RUN PICK [[YOU ATTENDED THIS PANEL]]~
    [[YOU'RE GLAD WE ATTENDED THIS PANEL]]~
    [SE [YOU'RE GLAD] GLADGLAD]
END
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Brian Harvey, Jenny Sendova