Having arrived in Stony Brook in 1963, I encountered my first computer in 1965 at the already skeptical and unimpressionable age of 31. In those days computers were not much different from the player pianos in Grandma’s parlor which, fundamentally, operated on little holes in paper.

The nerds1 of the fifties, with their slide rules strapped smartly to their sides, had been replaced by the nerds of the sixties, with their piles of wide folded paper with funny little holes on the border, harder to retold than a road map, and their neat little stacks of pockmarked cards upon which they devilishly took notes in class (much to the consternation of us humanists). "DO NOT BEND, FOLD, SPINDLE OR MUTILATE," warned the punch cards, as they were called, which soon enough not only signaled the presence of nerds, but began arriving with everything from our gas bills to our library overdue notices. It was a warning to be heeded as rigorously as the tickets on mattresses, demanding not to be removed.

International Business Machines Corporation, the leading but not the only name in computers in those days, approached me, a freshly baked Ph.D. in Middle High German literature and comparative/historical linguistics, with a proposal that I write the content portion of a CAI program for German. It seemed irrelevant to them that my
research interest at that time was transformation rules for active to passive Middle High German sentences with dative and genitive direct objects. Or that my hobby was (and still is) writing dawn songs in the fashion of the *trouvères* (*Minnesänger*), a far cry from anything to do with computer instruction. They were giving me the opportunity to be a nerd-and with generous consulting fees, just like the scientists. I felt flattered, not yet having heard of the Hawthorne effect. I knew nothing about programming, and my New High (modern) German was growing suspect from lack of use, since I had been principally preoccupied with Middle High German (the 1200s): my dissertation had been entitled *A Consideration of Humor in the Middle High German Courtly Epic*. No matter. I was a linguist, by virtue of having coauthored an introductory grammar of Urdu (Pakistan) for the U.S. Peace Corps. It seems to me now as if I were being elevated to my level of incompetence, but if that was the Peter Principle, it was also the state of the art.

Accordingly, I suggested to IBM that my new colleague, John Russell, also a freshly baked Ph.D., be invited aboard because of his fluent and up-to-the-minute German. He had recently taught in Germany, and, additionally, we were working on a conventional German text together, on our way to an integrated multimedia course. Little did I know that John, like a butterfly to a candle, would be lured to the glow of the CRT for life. Actually, there were no "tubes" in those days, just typewriter displays which were agonizingly slow once you got into the scheme of things. With the addition of John to the program came the loss to the academic world of its foremost authority on the 18th-century German writer, Graf Moritz August von Thümmel (1738-1817). The loss was only partial and temporary, however, as John has returned to the study of 18th-century German literature, in his "retirement."

H. William Morrison, then of IBM, currently in the psychology department at SUNY Stony Brook, served as liaison between us, the authors of the German content, and the Thomas J. Watson Research Center in Yorktown Heights, New York (Adams, Morrison, and Reddy 1968). He had the temerity to discuss algorithms and parameters in testing and curricula, things that we humanists had not talked about since Plato (the philosopher, not the program!). Most of us Germanists had been testing subjectively after the models of our *Doktorväter* (there were few *Doktormütter* in those days), who
had modeled themselves after their *Doktorväter*, going back to the greatest *Doktorvater* of them all, Jakob Grimm, whose romanticism surfaced not only in his collections of fairy tales (with his brother) but also in his and our attitude toward language. Time for some discipline; time to leave the fairy tale world. And definitely time to figure out what this word "program" meant.

Our initial attempts to get our material into the computer were through a telephone hookup (startling arrangement in those days) to the Center in Yorktown Heights, in upstate New York, far away from our Long Island campus. We shared our hookup and our time with a high school in Yorktown Heights that was participating in the project. Our display was a paper printout, painfully slow, on typewriter terminals in the Service Building, on the periphery of campus. It was in that outlying district that I first heard the term DOWN TIME. And I heard it often. It meant that our computer wasn't working; and then, of course, we couldn't work either.

ENTER. How often did we see participants staring vacantly at the printout waiting for the computer to "say" something? If the computers were so damned smart, how come you had to tell them when you were done?

Apparently we had done something right, because shortly after these bumbling efforts the University contracted with IBM to have installed a custom computer, the 1500, in the basement of the Social Sciences Building in the center of the campus. I now saw my first computer! (In Yorktown Heights, the computer had been so big that it was all over, everywhere, like the scarecrow in The Wizard of Oz.) It was an apparition that anticipated Star Trek (any generation). Blinking lights. Reels of tape spinning back and forth, quite arbitrarily, or so it seemed. Cards dropping into little boxes. People running around with oil cans and screwdrivers. Remote CRT terminals. As huge as a house! A whole new vocabulary: DOWN TIME. UP TIME. ON-LINE.

Suddenly, it seemed, we had become famous.

The drills we contrived were, of necessity, relatively easy to edit. Editing was a principal criterion, resulting in quite unimaginative content. Branching was unthinkable. Some examples follow (much of this program has been rewritten, largely by John Russell, in a more imaginative fashion). Think state of the art, 1960s:
Substitution Drill
Given: Sieht die Frau den Mann?
Cue: (pronouns)
Response, Sieht sie er?
Edit: Sieht sie ?
Response-. Sieht sie ihn?
Confirmation: r(ichtig)

Embedding Drill
Given: Da steht der Mann. Er ist groß.
Cue: +
Response: Da steht der groß Mann.
Edit: Da steht der groß_ Mann.
Response: Da steht der große Mann.
Confirmation: r

Sentence Ordering (with remediation):
Given: (1) morgen (2) du (3) fährst (4) in die Stadt ?
Response: 2 3 1 4
Remediation: German yes/no questions begin with the finite verb.

Given: (1) morgen (2) du (3) fährst (4) in die Stadt ?
Response: 3 2 1 4
Confirmation: r
Fährst du morgen in die Stadt?

Other exercises were equally easy to edit. Branching and inference drills were yet to come. By no means was this the only program of its kind (Ruplin 1973); but information about other projects was hardly complete and instantaneous; communication was essentially via lecture circuit. Indeed, we were surprised to discover that the Doktorvater of one of us (Cecil Wood, University of Minnesota) was doing essentially the same thing at another university (Wood and Clausing 1974). Nor was CAI the core of our program. It was seen as a fully integrated component of what was becoming a rather complicated, eclectic totality (Ruplin 1972).

Students' reaction to the program was generally positive; they considered it "new" and "neat." They were only rarely troubled by the typewriter keyboard. It must be remembered that nobody had a PC at that time; the experience was totally new. Students are flexible. Our colleagues, on the other hand, were not so keen on it. Some
(not all!) of those not involved felt threatened by it and expressed this overtly ("It will put us out of work") or in their reactions to it, per se.

One such reaction occurred when a colleague tried out our program at a workshop, using this exercise:

**Translation Drill**

Given: I can't understand it.  
Cue- translate  
Response- Ich kann es nicht begreifen.  
Edit: Ich kann es ______.  
Response: Ich kann es nicht begreifen.  
Edit: Ich kann es nicht ver ______.

Not to be led away from his insistence that "begreifen" was a correct answer here (which it is), the colleague tried several times, becoming more frustrated until the computer finally released its victim by editing in its desired response ("verstehen"), having, in its infinite ignorance, rejected a near synonym.

Whereupon ensued the following dialogue (reported from memory):

*Author:* The computer wanted "verstehen."

*Colleague:* "Begreifen" means the same damned thing.

*Author:* This program is for first semester students  
"Begreifen" is not in the program.

*Colleague:* Stupid damned machine!

Whether this reaction was simply annoyance with the stubbornness of the computer, distaste of technology overall (which sometimes seems to have the upper hand over us), or a touch of fear (what if they someday teach it to accept all correct answers? Will it put us all out of work?), many colleagues greeted every demonstration as a challenge to them to prove they were smarter than the machine.

While the response from literary colleagues was lukewarm at best ("Better you should be writing on thirteenth century German literature"), the program, primitive though it was, garnered respect among colleagues in the CAI community. We were invited to discuss our program at the charter meeting of the American Council on the Teaching of Foreign Languages (ACTFL) in Chicago; at meetings of the American Association of
Teachers of German (Chicago, New Orleans, Atlanta, New York, Buffalo, among others); by the Avignon, France, Chamber of Commerce; in East Germany; and in Poland. The West German government sent representatives of its Ministry of Education to study the program, and the program found great resonance among the press.

It must be recalled that they (and we) were impressed by a building sized machine with blinking lights, making beeping noises and spewing pock-marked cards. Now our grandchildren have personal computers with greater capacities in their nurseries. Their children will probably have computers with still greater capacities in their wristwatches.

I abandoned CAI in the mid seventies; John Russell is still heavily involved in it and is still on the circuit. I did come out long enough to engage in a project with him (Ruplin and Russell 1988), which shows promise in the development of inference drills in German pedagogy. But I have returned to the farm (my roots) to write poetry. I do not have a word processor (or a VCR or a microwave oven), but I have permitted myself the luxury of a typewriter (we do have electricity on our farm!). I can barely remember the "glory days," the days of free dinners, cocktail parties, travel and rapt attention to our presentations. I am not up to date on CALL, Al, etc. But I wish well to all who are.

I am back to Middle High German literature, and I take the liberty of closing this article with a few lines from Walther von der Vogelweide (ca. 1210), which I have loosely translated, very loosely, to suit my needs:

\[\begin{align*}
\text{Ouwê war sint verswunden alliu miniu jâr?} \\
\text{ist mir mîn leben getromet, oder ist ez wâr?} \\
\text{daz ich ie wânde daz iht waere, was daz iht?} \\
\text{dar nâch hân ich geslâfen und enweiz es niht.} \\
\text{nu bin ich erwachet, und ist mir unbekant} \\
\text{daz mir hie vor was kündic als mîn ander hant.}
\end{align*}\]

Alas, where have they gone, all my years?
Did I dream my life, or was it real?
Was it real, that which I thought to be?
Then I went to sleep without knowing it.
And now I have awakened, and unfamiliar to me
Is all that I knew like the palm of my hand.

It was a gas!
NOTE

1 a pejorative word often used more or less ironically (as of 1995) to refer to heavy users of technology, “nerd” is defined in The American Heritage Dictionary, 3rd edition (New York: Dell, 1994) as “an unpopular or socially inept person, esp. one regarded as excessively studious,” and traced cautiously (“perh. after”) to the character by that name in the children’s book If I Ran the Zoo by Theodor Seuss Geisel (“Dr. Seuss”; New York: Random House, 1950).—The Editor

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Ferdinand Ruplin was born in Minneapolis, Minnesota. Ph.D. in Comparative/Historical Germanic Linguistics, University of Minnesota. Instructor of German, University of Minnesota, 1961-63. Language Coordinator, U.S. Peace Corps Training Projects (Pakistan and India), 1962-63. Department of Germanic and Slavic Languages, SUNY at Stony Brook, 1963-93, currently Associate Professor Emeritus. Linguistic consultant, IBM et al. Publications: language texts, language and linguistics, scattered poetry.