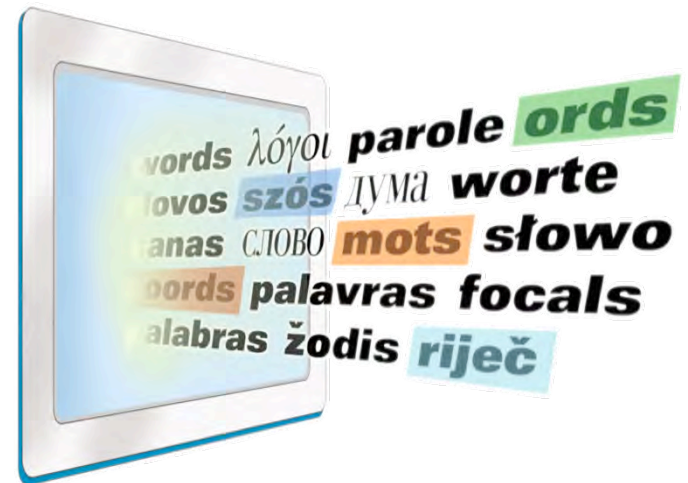


# Tutorial CALL, our prodigal son?

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# The prodigal son

There was a man who had two sons. The younger one said to his father, 'Father, give me my share of the estate.' So he divided his property between them. Not long after that, the younger son got together all he had, set off for a distant country and there squandered his wealth in wild living. After he had spent everything, there was a severe famine in that whole country, and he began to be in need. ... I will set out and go back to my father and say to him: 'Father, I have sinned against heaven and against you. I am no longer worthy to be called your son; make me like one of your hired servants.' So he got up and went to his father. But while he was still a long way off, his father saw him and was filled with compassion for him; he ran to his son, threw his arms around him and kissed him. ... The father said to his servants: 'Let's have a feast and celebrate. For this son of mine was dead and is alive again; he was lost and is found.' So they began to celebrate.

# Tutorial CALL

- ☑ **PLATO** (Programmed Logic for Automatic Teaching Operations): PLATO IV (e.g., German) at the University of Illinois in 1973 (Hart, 1995)
- ☑ **TICCIT** (Time-shared Interactive Computer Controlled Information Television) German instruction at Brigham Young University in 1979
- ☑ **CALIS** (Computer-Aided Language Instruction System) at Duke University in 1979 (Borchardt, 1995)
- ☑ **DECU/TUCO** (Deutscher Computer Unterricht, Tutorial Computer) developed at Ohio State University in 1973/74 (Taylor and Pennington, 1982).
- ☑ **Storyboard** / Fun with Texts in England in 1985 (Davies, 2007)
- ☑ **Athena** project at MIT in 1985 (Kramsch, Morgenstern, & Murray, 1985)
- ☑ **HotPotatoes** at the University of Victoria in 1998 (Arneil & Holmes, 1999; Winke & MacGregor, 2001)
- ...
- ☑ Quiz engines in **virtual learning environments**
- ☑ Textbook publisher **websites** with online language-learning activities
- ...





# Language learning activities

## Language awareness and learning

- **Reading** and incidental **vocabulary** learning with augmented texts  
(Glosser RuG (Nerbonne et al., 1999); QuickAssist (Wood, 2010))
- **Scaffolded and supported writing**  
(LinguaWrite (Bruzzone, 1980s); SWIM (Zock, 1988); IADE (Cotos, 2009))
- **Listening** (and speaking) with written support (speech to text)
- **Speaking** with pronunciation modeling and goodness of pronunciation feedback (online dictionaries)

## Language use, practicing, and testing

- Look-up in dedicated dictionaries (Dire autrement (Hamel & Caws, 2010)) and corpora
- Data-driven learning with learner-aware tools (language-aware search engine (Ott & Meurers, 2010))
- Individually tailored language practice with contextualized corrective feedback (e-Tutor (Heift, 2010))

# Whatever happened to tutorial CALL?



- introduction during behaviorist programmed instruction
- technological advances (hardware and operating systems, multimedia, local networks, WWW, VLEs and social media)
- communicative competence, translingual and transcultural competence and their transfer into theoretical and practical pedagogy

# Practice

“Sometimes maligned for its allegedly behaviorist connotations but critical for success in many fields from music to sport to mathematics and language learning, *practice* is undergoing something of a revival in the applied linguistics literature” (Long and Richards, 2007, p. xi).



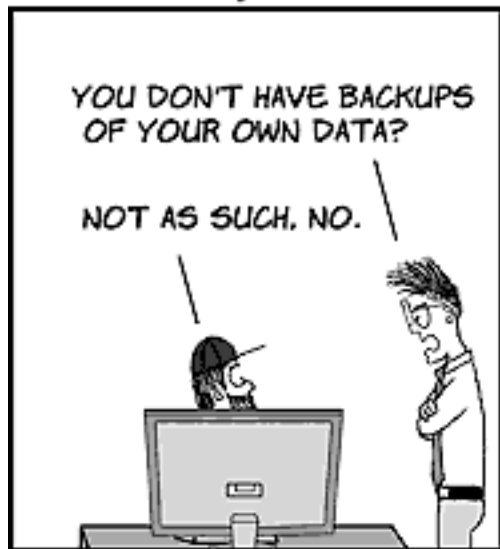
# Necessary research

- Feedback beyond knowledge of result
  - contextualized, contingent feedback types
  - preemptive feedback and individualized guidance
- Engagement and learning outcomes
  - time on task
  - activity types
  - sub-languages, (abstract) construction types, semantic fields, and communicative functions for practice
- language awareness
  - noticing (salience) and scaffolding
  - support [plethora of studies on glossing]





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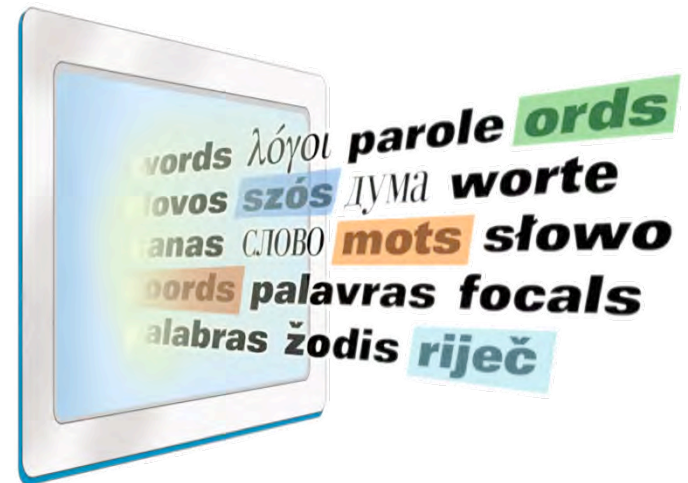
Danke!

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# Human language technologies

## textual analysis

- string matching; regular expressions
- concordancing and indexing
- lemmatization; morphological analyzer; generation of inflectional paradigms
- part-of-speech tagging
- spell-checking (Levenshtein distance)
- parsing of constrained input
- ...

## resources

- (mini) corpora for or by learners
- parallel corpora
- translation memory
- machine translation
- electronic dictionaries; thesauri; encyclopedias
- word nets
- speech recognition and synthesis
- ...



# Language Technology

*Language and Technology. From the Tower of Babel to the Global Village* (European Commission, 1996), by using an admittedly broad understanding of the term, provides the following **examples** of language technology: typewriter, ballpoint pen, spell checker, word processor, grammar checker, thesaurus, terminology database, printing, photocopier, laser printer, fax machine, desktop publishing, scanner, modem, electronic mail, machine translation, translator's workbench, tape recorder, database search engines, telephone.

# Computers in Language Learning

- **CALL**

- trans-disciplinary field of research, development, and praxis in a dialectic relationship with contemporary discourses on learning, language, and technology
- tools and tutors
- computer-mediated communication and **tutorial CALL**



- **ICALL**

- nexus of Artificial Intelligence and CALL
  - natural language processing (understanding and generation)
  - student modeling
- but also corpus linguistics, machine translation, speech synthesis and recognition