

In Memoriam
Elizabeth Bates, Ph.D.
(1947–2003)



It has been almost 9 months since I last saw Elizabeth Bates at her home in La Jolla, and exactly 6 months since she died, on the 13th of December of last year, from pancreatic cancer. It has taken many months for me to get started writing this short note to the readers of *Brain and Language*, a sad but cathartic exercise, and it has only been possible because of my current trip to Liz' adopted second country of Italy. Tomorrow is a planned visit to Liz' favorite restaurant in Bologna, and I just checked my e-mail records for the name and address. (This is my first trip to Italy in 15 years for which I did not seek Liz' counsel beforehand on sites, both touristic and gastronomic, to visit during the stay.)

In that e-mail of the 6th of November 2002, about a year before she died, Liz fearfully noted that she was manifesting the same symptoms as her mother, who had died 4 months after diagnosis of pancreatic cancer. With the help of intensive research, good medical care, and the tremendous support of her family and enormous number of friends, Liz lived for 13 months from diagnosis, 9 months longer than her mother, and 7 months longer than the median. During this time, Liz retained her sense of self, of straight talk, of honesty, of pleasure in life, and even her sense of humor. Six months after diagnosis, she held a “median survival busting” party at her home, a macabre thought to some, but a characteristically straightforward, albeit emotionally charged,

event for Liz. Long after she could have a sip of wine, and even after she was able to enjoy eating much in the way of food (garlic or no garlic), she nonetheless hosted dinner parties at her home, wine and pasta in abundance. She died at home, and both her husband and daughter, George and Julia Carnavale, were at her side. For the last year, literally hundreds of colleagues and friends passed through La Jolla to spend some final time with her. Several months before Liz died, she also got one final trip to her beloved Italy and one more visit with her dear friends in Rome and those from other Italian cities who descended on Rome to spend some final minutes with her.

Although most readers of this journal don't need much introduction, perhaps some of you did not have the opportunity to meet Elizabeth Bates, to hear her lecture, to laugh at her jokes, or to nod in agreement with her brilliant and irreverent critiques (or to flush with exasperation at her misguided lack of comprehension—I was in the former camp, of course, but many colleagues were not). Many of us have heard stories about Chicago, where she got her Ph.D. in human development; about Boulder or La Jolla, where she held faculty appointments; about Bulgaria, England, Germany, Hungary, India, Italy, Mexico, Russia, Taiwan, and Tanzania, where she had collaborations in cross-linguistic aphasia; and of course, about Rome, where she had a second home, a second language, many collaborations, many friends, and a special contentedness.

Elizabeth Bates was widely known and respected throughout the world, by scientists and clinicians of many stripes, for many diverse research programs as well as for teaching efforts in the psychology and neurology of language. Few people in science can be recollected by diverse groups of researchers by mention of only their first name; but everyone in language knew that Liz was Liz Bates, the one from La Jolla (and Rome), with the brilliant ideas and quick wit (and purple shoes). Her broad array of research efforts have been listed many times already, and include the MacArthur Communicative Development Inventory, the International Cross-Linguistic Consortium, the SDSU/UCSD Joint Doctoral Program in Language and Communicative Disorders, the International Picture-Naming Project, Voxel-Based Lesion-Symptom Mapping, and the UCSD Project in Cognitive and Neural Development. She conducted studies in over 20 languages on four continents and authored or co-authored 10 books and over 200 articles. During more than 30 years, Liz was a major innovator, contributor, and leader in many fields of inquiry relating to the brain and language—child development, language acquisition, aphasia, cross-linguistic research, and adult psycholinguistics.

Liz did not separate language from cognition, nor did she divide studies of language and cognition from studies of the brain. Her theoretical work makes this clear, from the Competition Model of the 1980s through the “rethinking innateness” work of the 1990s. She focused on many fundamental issues about brain/behavior relationships, including modularity, embodiment, plasticity, and innateness. She wanted nature and nurture to get more equal billing than many (on both sides) would have liked. She liked modularity, as long as the grain size was quite a bit different than most modularists preferred. She favored some aspects of embodied cognition, but questioned the mechanisms. She was a theorist who liked computer “hacking” (in the sense of her generation, i.e., model building of a procedural, rather than declarative, nature). She worked from the bottom-up and from the top-down.

Liz Bates was a great educator and a fantastic colleague. She has mentored many doctoral students, post-doc fellows, visiting scientists, and not-visiting scientists. Her students have learned how to ask questions, to work on answers, to be collegial and collaborative, and to perform excellent research. They have learned to question authority and to respect data. They are successful and maintain adoration for their advisor.

Liz was a very kind supporter of her friends and colleagues. She wrote letters of support and sent lots of e-mails and made many phone calls in support of her colleagues. I was a major beneficiary: Her alma mater, the University of Chicago, had an opening for a neurologist and brain imager, and Liz called me up and described for me at some length why the University of Chicago and I were made for each other. What I didn't realize at the time was that she gave this same message to the chair of neurology, the chair of psychology, the dean, and the appointments committee too. In subsequent e-mails to me, after I was well installed in the position, she would make allusions to “Chicago,” as she called it. Her e-mail to me of November 2002, which included her Bolognese restaurant suggestion and her recognition of cancer, contained one of these references too: “Glad to hear you are doing the Parma Pilgrimage! I did it myself a few years ago, it's a really interesting group... look at [the] ... experiments on gesture-language ... very ‘Chicago’ in style.”

Well today I am back in Parma, and thinking about Liz, and wanted to share these thoughts with the readers of *Brain and Language*. She was a remarkable scientist, a wonderful friend to many of us, and a role model for all of us. A memorial service was held this past 15th of February at the Salk Institute in La Jolla, and many friends and family shared their thoughts, some of which are available at <http://crl.ucsd.edu/bate/memorial/>.

I would also like to note that in memory of Liz Bates, a fund has been set up to provide student scholarships.

Contributions can be sent to the Elizabeth Bates Graduate Research Fund, c/o Center for Research in Language–MC 0526; University of California, San Diego; La Jolla, CA 92093-0526, USA. In keeping with her deep commitment to supporting students, this fund will be used to assist graduate students in their research, emphasizing the many areas in which she made pioneering contributions.

Addendum: In this issue of *Brain and Language* is published a final manuscript by Elizabeth Bates that was in revision at the time of her death. It had received one

full set of reviews, and Liz was in the process of discussing the revisions with her students when she became terminally ill. It has only been revised in small ways since those reviews, and only in accordance with what her students actually know of her wishes in this regard.

Co-Editor
Steven L. Small

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