

Donald E. Walker:

A Remembrance

Barbara Grosz and Jerry R. Hobbs



Don Walker had a vision of how natural language technology could help solve people's problems. He knew the challenges were great and would require the efforts of many people. He had a genius for bringing these people together.

In preparing this tribute, we asked a number of people who had known Don over the years to send us reminiscences. Although each person's story differed, a striking commonality emerged. It is remarkable how often Don was present at the key juncture in people's careers, and in his understated, soft-spoken, low-key way, he did just the right thing for them. What Don did almost always involved bringing people together.

There is a story by Jorge Luis Borges in which someone travels all over India attempting to discover the nature of a very wise man through the subtle but profound influence he had had on the people he met. Reading the reminiscences about Don and seeing the impact he had on people's lives reminded us of this story.

Don organized research teams. He was often instrumental in matching people with positions in laboratories that were far from his own as well as in groups that he managed. Several people attribute to Don significant help in starting their careers or in finding the funding that supported their most productive period of research. He often gave essential advice or provided the key opportunity that led to a fruitful new direction in someone's career. Don knew who was doing everything, how to get in touch with them, and how to facilitate the appropriate actions that matched the person with the opportunity.

We were both a part of the natural lan-

guage group that Don built at SRI in the 1970s, a group that continues today, in our opinion, as one of the premier natural language research groups in the world. He gave one of us (Barbara Grosz) her first AI job, even though she had yet to pick a thesis topic, let alone finish a Ph.D. In doing so, he took a risk of a magnitude that she fully appreciated only years later when she herself was hiring research associates. It was not a unique gamble for Don; he was often credited with identifying good people before their reputations were widely established.

The other of us (Jerry Hobbs) met Don at the ACL conference in Boston in 1975. Don greeted him so enthusiastically that he applied for a job at SRI. Little did he know that Don greeted everyone that way.

Don was a wonderful group leader, in part because he so thoroughly integrated the personal and the professional. Don appreciated and cared about the whole person of each one of us and nurtured us. We were as much family as research group. We worked hard and we argued hard, but we appreciated one another and were truly a team. We bonded closer in crises in a way that few groups achieve. Don knew his people and led us to work together through the best and the worst. He demonstrated that one need not compromise personal warmth or care for individuals to have a top-rate research group. He continued to provide guidance for members of his group even after they moved to different labs. He often worked behind the scenes in many places and at many crucial junctures to make sure that their work was recognized. Don would never admit to these efforts, but he smiled in a certain way when asked. Ask-

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ing was the closest one could come to saying thanks and the smile the only sign that he welcomed the appreciation.

Don not only brought people together; he also brought disciplines together. In forming the SRI natural language group, he built up an interdisciplinary group of researchers long before *cognitive science* was a phrase and long before the need for interdisciplinary approaches to the study of language was taken for granted. He firmly believed that interdisciplinary work was the only way to go; to succeed at building the kind of computer systems they were after, AI researchers would have to be acquainted with linguistics, philosophy, psychology, and sociology. He constructed an environment that freed us to concentrate on our research, and he communicated to us his own excitement and enthusiasm for what could be done in this new interdisciplinary, unpredictable field where human language and computers meet.

Don was well known for his service to many AI and computational linguistics organizations. He played a central role in the organization and operation of the International Joint Conferences on Artificial Intelligence (IJCAI), the American Association for Artificial Intelligence (AAAI), the Association for Computational Linguistics (ACL), and the International Conference on Computational Linguistics (Coling). He was secretary-treasurer for most of them, and for some, he worked for many decades. Expressing a theme that appeared again and again in the reminiscences, Wolfgang Wahlster, conference chair of IJCAI-93, said, "Don guided me like a father through the complex IJCAI world." This feeling is one we share, and we are sure every ACL and IJCAI official through the years has felt the same way.

Don was program chair of the first IJCAI conference and general chair of the second. Alistair Holden, who was general chair of the first IJCAI conference, reports that as the general chair of the second conference, Don "organized IJCAI as it is today, an independent body governed by trustees who come from the international AI community.... [He] provided the continuity and organization that have led to the present IJCAI success." As secretary-treasurer of IJCAI for many years, Don provided invaluable guidance to successive conference chairs and boards of trustees. Recently, the Principles of Knowledge Representation and Reasoning Conference, incorporated in March 1993, adopted a governing structure that closely mirrors the IJCAI conferences. It is no small tribute to Don that a

structure he formulated more than 20 years ago is being copied today.

In recognition of Don's many contributions to the IJCAI organization and his great service to the international AI community, the IJCAI, Inc., Board of Trustees renamed the IJCAI Distinguished Service Award at IJCAI-93. The award is now the Donald E. Walker Distinguished Service Award. Daniel G. Bobrow, the first recipient of the newly named award and a former president of AAAI, remarked on accepting the award that Don had provided a model of service that everyone in the field could look up to.

Don's well-known organizational skills led Raj Reddy to invite him to participate in formative discussions about AAAI (on the way to IJCAI-79) and designated him the first secretary-treasurer. Don's knowledge of financial procedure was invaluable in these early days, as was his considerable memory for the details of the charter, California law, and resolutions passed in council meetings. Don was so absolutely dependable and trustworthy, and he was always fair. He carried his sense of what was right to the complex discussions of arrangements between AAAI and IJCAI. His considerable efforts and negotiation skills were important to establishing a good working relationship between the two organizations.

Don was instrumental in the development of ACL. When he took over as secretary-treasurer, the organization was relatively small. It grew, and Don's job grew with it in size and complexity. The range of concerns with which Don dealt and the scope of activities he managed behind the scenes in building up ACL were enormous. He and his wife Betty were the ACL office, but Don did much more than manage the basic affairs of ACL. His continual concern and respect for all the different parties in ACL and for ACL's wider interests in the community, especially the international community, are evident in the ways in which ACL expanded and in the activities the organization undertook. ACL as it exists today is a manifestation of Don's vision and leadership.

A listing of Don's service roles does not make apparent the depth of Don's contribution because it goes far beyond the day-to-day management he often provided. Don's service mattered so much because it was always in the interest of a larger goal that he cared passionately about. When he participated in the organization of a new conference or the founding of an organization, it was not for its own sake (or because he didn't already

have enough irons in the fire) but because he thought it was necessary to further an important research goal. The goals, as well as the conferences and organizations, were always integrative. IJCAI brings together researchers from around the world and across the fields of AI; Don constantly reminded the trustees and the advisory board of the importance of safeguarding both dimensions of its diversity. Coling is likewise international, and with much guidance from Don, ACL has also evolved into an international body. Having helped to foster the now-flourishing European chapter of ACL, he looked toward a chapter on the Pacific Rim. Don was always inclusive, never exclusive.

Don brought people together in other ways. He organized a fund and helped arrange it so that Eastern Europeans were able to visit their colleagues abroad. The computational linguistics community in Eastern Europe benefited greatly from Don's efforts toward its integration into the international research community, especially the initiation of the international fund that gave them all the advantages of ACL membership. His initiative in making the journal *Computational Linguistics* available to colleagues in Eastern Europe was later emulated by other AI societies.

In tribute to Don's efforts toward the computational linguistics endeavor he found so exciting, as well as his and Betty's long-standing contributions to ACL, the ACL Executive Committee established the Don and Betty Walker Student Fund. This fund enables students to attend ACL meetings. His legacy will live on, bringing together people who never had the good fortune to know him. (Don did not know about this fund until it was announced at the 1993 ACL meeting; he was extremely pleased that ACL chose this way to honor him. Contributions to this fund can be sent to the Association for Computational Linguistics, c/o Judith Klavans, Box 105, Hastings-on-Hudson, NY 10706.)

In recent years, Don's research and his organizational efforts took a new turn. Corpus-based natural language processing, which currently might be the fastest-growing and most exciting area of computational linguistics, owes a particular debt to Don's vision and leadership. He recognized the importance of working on real natural language corpora and other linguistic knowledge resources before it was in vogue, and he developed and sustained successful efforts to

organize the collection and annotation of databases for corpus-based research. In particular, he played crucial leadership roles in the ACL Data-Collection Initiative, which has now made available a variety of corpora to the international research community, and in the Text-Encoding Initiative, which has brought together international organizations concerned with textual research to create a standard for encoding machine-readable text. Through the Text-Encoding Initiative, Don became interested in humanities computing and its approaches to working with large textual databases. He soon realized how much this community and computational linguistics could benefit from interaction with each other and, in his characteristic way, went on to foster these interactions.

His influence and support can also be seen in the European Corpus Initiative, the Linguistic Data Consortium, and the Consortium for Lexical Research, all of which are actively contributing to the variety and quantity of corpora and lexical resources available to the research community in natural language and speech processing, linguistics, and the humanities. All his effort was in the service of a long-term vision he referred to as *the ecology of language*, that is, the attempt to characterize the contexts in which people use language and, thus, in which natural language technology can be made useful to people. This theme is reflective of his aims throughout his career.

The delight that Don took in his work and in the people he worked with was infectious. Many times he would try to share this delight with friends who were strangers to the field. His face would light up; his hands would orchestrate his attempts to make them understand the wonder of it all. Often he would search in vain for a word that would convey how he felt about the field, the people, and the ideas, and he would end up saying something like "it's just so..." and fall back with a sigh to *elegant* or *amazing*, extending his hands as if to shape the elusive message.

The ancient Chinese reserved a special place in heaven for people who built bridges. Don Walker built bridges.

(This remembrance was a composite of the reminiscences of a number of people, including Robert Amsler, Woody Bledsoe, Bruce Buchanan, Eva Hajivcova, Susan Hockey, Alis-tair Holden, Fernando Pereira, Jane Robinson, Karen Sparck Jones, and Wolfgang Wahlster.)

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