Theo Mandel: Tennis, psychology, and software

The Elements of User Interface Design **by Theo Mandel,
1997. Wiley & Sons, $44.95.**

By CHARLES ASHBY, **for the Camera
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Theo Mandel started life as the son of a popular English professor at the University of Colorado and a well-known Boulder artist-author.

From that beginning, he went on not only to earn a doctorate in cognitive psychology – using that knowledge to help develop user-friendly software – but also to shine as a nationally ranked tennis player.

It's a wonder the Boulder native – who lives in Texas during the winter and Boulder in the spring and summer – found time to write two books designed to help computer software companies create more user-friendly programs.

The latest, *The Elements of User Interface Design*, is hitting bookstores this month. Mandel's accomplishments aren't surprising considering his parents, say friends and business associates.

His father, Siegfried, taught comparative literature at CU for more than 30 years, writing 20 books. He died in 1993. His mother, Dorothy, who died in 1995, wrote biographies and became known locally for her woodcuts and drawings.

"I guess it was sort of in my genes to write," Mandel, 45, said from his Austin home. "But I mainly do consulting and education with software companies, either internal software for their employees or companies that develop software for the public."

Mandel first made a name for himself in Boulder through tennis.

While attending Boulder High School in the late 1960s and later as a graduate student at CU in the '70s, he often competed in tournaments, mostly through the Harvest House Sporting Association and the Boulder Valley Racquet Club.

That's when he met Tracy Leonard.

Joy of tennis

"Theo is one of those people who manifest the joy of playing tennis," said Leonard, 52, who lives in Boulder. "He is perhaps one of the most inspirational partners you'll ever have. He runs to get every ball."

At the time, Leonard was testing tennis equipment for sporting manufacturers, publishing his reports in **Tennis Magazine** and the **New York Times**. Working out of the Racquet Club, he and Mandel tested new racquets with such great tennis stars as Arthur Ashe Jr. and Guillermo Vilas.

"We would go on the court with Vilas and hit tennis balls, beating on him as hard as we could," said Leonard. "Our job was to help this man get comfortable with a new tennis racquet we were building out of wood with graphite laminations for the first time. Vilas later went on to become world champion with that racquet."

Leonard could see then that Mandel would become more than just a tennis bum.

"Theo was at that point just a struggling journey-man tennis player who wasn't going to be a Guillermo Vilas even though he was a damn good local tennis player." said Leonard. "But he was a big help in being able to give Vilas what he needed and help me harvest from (Vilas) what we could. He has a marvelous and wonder dedication to tennis and the computer world."

Over the course of the next 20 years, the duo would continue to test tennis equipment, finally melding Mandel's computer knowledge with the task. Mandel designed a program that streamlined the testing, Leonard said.

That experience, and the emergence of the personal computer, led Mandel to realize his calling. Someone had to help computer companies develop software that was simple enough for the layman to understand, yet sophisticated enough to get the job done.

Software interface design

Brian Phillips, president of Sys.test Labs in Denver, has seen firsthand not only how much Mandel knows about making computers easier to use, but how helpful his new book is. Mandel's contribution to Phillips' work is similar to how he helped Leonard, but in developing computer software rather than tennis equipment.

"When we go into a company that's not sure what to do with user interface, we promote Theo and his expertise," said Phillips, who has been writing and testing computer software for the past 16 years. "Theo handles the user-interface side, while my firm tests the technical side."

Phillips said people like Mandel are in large demand these days, now that computer companies are beginning to realize that their products sell much better wen they are based on their user-friendliness.

"Keeping the end user in mind more in developing software has only happened since the late 80's," he said. "What you see now are a lot of companies bringing in focus groups of their end users and trying to really understand their specific needs for doing their jobs."

As a member of a software development team for IBM in 1991, Mandel developed what is called an object-oriented user interface (OOUI), commonly seen on the Internet and in the OS/2 Workplace Shell and Windows 95/NT computer operating systems. Until that time, the industry norm was to use a graphical user interface (GUI), which didn't always look like what it was intended for.

"Objects should look like they work and work like they look," Mandel said. "They should work like things people are already accustomed to, like a trash can or a telephone."

That change in computer design led Mandel to write his first book, which has a title only a person with a doctorate could love: *The GUI-OOUI War: Windows vs. OS/2. The Designer's Guide to Human-Computer Interfaces*.

Mandel also designed a touch-screen interface common in many businesses today as part of a multimedia project between IBM and Blockbuster Entertainment.

Consulting firm

In 1994, Mandel created a computer consulting firm in Austin -- **Interface Design and Development**. From there, he has traveled nationwide and to Europe helping the computer industry and individual companies make their software more user-friendly.

Mandel graduated from Boulder High School in 1970, earned a bachelor's degree in psychology from Miami University in Oxford, Ohio, in 1974 and completed the master's program in cognitive psychology at CU in 1978 before earning his doctorate in 1983.

Along the way, he has taught tennis at the Harvest House and in Sarasota, Fla., led computer design classes at the University of Texas at Austin, and conducted technical education courses and training seminars for private firms either in classrooms, on television, or through satellite education networks.

His love for tennis continues. Last year, he was ranked No. 1 by the United States Tennis Association in the 45-and-over age group for Texas and the Intermountain section, a six-state area that includes Colorado.

"I'm always striving to use both parts of my brain -- my brain and my body," he said. "So, for as much as my computer and intellectual stuff I've done, I've still tried to stay active."