ACTIVE CAT SOFTWARE

By Daniel P. Glassman

After many years in the Computer-Assisted Transcription software industry, I've come to see CAT products as being either **Active CAT systems** or **Passive CAT systems**.

A Little History

Traditional CAT products evolved out of methodologies created in the 1970's and early '80s that were tied to hardware limitations and proprietary hardware platforms. Stenograph's CAT systems were available on Data General and Texas Instruments hardware. BaronData's CAT systems were on DataPoint, Unisys and other types of hardware; and Xscribe made its own computers.

It was particularly difficult for companies to evolve gracefully into the PC world because of a need for backward compatibility to older systems and methodologies. One of the reasons was that early purchasers of CAT systems often paid up to or over six-figure prices for their systems. To offer a more cost-effective solution to individual reporters would undermine the relationship the early buyers had with the vendors. It would also undermine the early buyers' control over their businesses and reporters.

When BaronData bought LexiCAT as its PC-CAT product or when Stenograph bought MicroCAT and introduced the Cimarron RTS (that it withdrew from the market after about six months), you had PC-compatible products at a reasonable price that had no compatibility with the older products these companies had sold. The same was true when Xscribe bought VertiCAT and created Maestro. More than once Stenograph went to Jerry Ransome in Texas and bought his products (Cimarron and OmniCAT), both of which fell into obsolescence not long after. What survived from all of the CAT acquisitions by Stenograph was OZpc, which was an extension of the Baron "mainframe" system. Premier Power evolved largely as a re-constituted OZpc with a new name but the same design structure and editing methodology.

You see when Quixote acquired BaronData in January of 1991, the software development group at Stenograph which had produced the Cimarron DEC systems and Cimarron PC systems was terminated by the

new management team that had been retained to run Stenograph. Not surprisingly, that group included Garrett Fitzgibbons (former president of BaronData), as well as BaronData's Rick Savage, Sam Edge, Eric Robinson, Cindy Welsh and others. Software development on the new Stenograph's products continued, then, in the former BaronData facilities in California.

This scenario for Stenograph products continued through the changes of several subsequent presidents and myriad vice-presidents until May of 1997, a month before Case CATalyst was to be delivered, when, after the Heico acquisition of Stenograph, the entire California development facility was closed down and software development efforts were taken up in Illinois.

In the meantime, the industry also saw the advent of a number of new PC-based CAT systems, starting with TomCAT and moving through MicroCAT, AristoCAT, LexiCAT, Virgus (AdvoCAT/Scriptor), ProCAT, Cheetah, StenoCAT, and Eclipse (and maybe even some others I've forgotten to mention.) What you see in the market today is a number of CAT products that, for the most part, all do a similar thing… that is, taking in machine shorthand outlines and constructing text.

The methodologies created in the 1980's and earlier, however, have evolved little in the intervening decades. Virtually all of them, with one exception that I am aware of (Eclipse by Advantage Software) use a basic methodology that can best be defined as a simple matching table (personal dictionary) to create text.

The text created by this basic methodology remains to be edited prior to printing. As a result, you have CAT systems that have focused on devising clever ways to fix or manipulate the text and clever ways to display realtime or captioning output signals, without a focus on improving the translation methodology and logic itself.

Computer-Compatible Theory vs. Reporter-Compatible Software

Before computers, reporters learned a variety of different non-computer-compatible theories. Just the term "computer-compatible theory" implies having to make accommodations for this new technology that was supposed to make life easier for its users. Computers had great memory but were pretty dumb when it came to figuring out stuff like conflicts, stacked strokes, and numbers.

So a collection of new "computer-compatible" theories evolved that taught reporters "conflict-free" writing. That meant learning how to write everything differently so that the computer could translate without having to "think" in the process. **The burden for good translation was transferred to the writer**. If the computer didn't give a good translation, something was wrong with the writer. Reporters became self-conscious about "having a lot of conflicts." Thus, many reporters simply refused to write realtime.

Why?

In my opinion, because of the failure of the developers of CAT systems to understand what the business was really all about and to build into their software the sophistication required to deliver text that requires a minimum of editing effort.

Why?

If the objective of a business is to generate a revenue stream for its owners, the easiest way to do that is to introduce a new product or upgrade that you can charge for every couple of years. That way, the effort and investment by the company can be focused on repackaging and marketing to create a demand for a "new" looking product. They can do this without fundamentally changing anything about the quality of product that the user ends up working on.

Look, for example, at the CAT products in just the 1990's that Stenograph has made obsolete: Cimarron (DEC), Cimarron PC, OmniCAT, OZpc, Premier Power, XEC, Maestro and XEC2001 (and AdvoCAT that was bought out of bankruptcy and shelved). Virtually none of these was developed by the company that sent them to CAT heaven. All were victims of a plan of acquisition for market share and customer base that could be "worked" through software migrations to move them to a single product and generate revenue for the company.

Other vendors have been caught up in this same cycle of new introductions, obsolescence, reconstitutions and upgrades, to generate new business as well. Again, the exception seems to be Eclipse.

This answers some of the questions, when one looks around the market to see what is available and what can be reasonably expected to really do something for the reporter today that it didn't do five or ten years ago. Eclipse has been under continuous development since 1987.

That means that for over 15 years, new methodologies have been designed into the product to create a transcription product that a reporter who bought in 1988 could be working on today, with all of the enhancements through true feature-rich updates.

Experiencing a software product that has built into it an understanding of language structure, grammar, punctuation, spelling and international character sets and formats is a rare event indeed. Watching reporters who strive for perfection and seeing how much an 'intelligent' software does to truly ease the effort required in editing would make anyone a true believer in what Eclipse does. When one sees correct translations of text appear when personal dictionary entries don't even exist, or where stacked strokes are recognized as such and correctly translated, or where numbers can be written free of concern for the method of writing, knowing that they'll be translated correctly, it is easy to get the feeling that there's something much much more to a CAT product than a simple translation system that most reporters have worked with.

That brings me back to the point of comparing an Active CAT system with a Passive CAT system. An active CAT system may be defined as a CAT system that invokes, in detail, an understanding of the language rules in which it works. It understands steno and knows there are such things as dropped or dragged (shadowed) strokes. It accommodates those "variations" in translating the notes. It's a CAT system that uses sophisticated 'intelligence' to resolve conflicts based on grammar rules, parts of speech, proximity to punctuation, etc. It is a system that accommodates and works with the way a reporter writes rather than expecting the reporter to change his or her writing to accommodate the software. It is a system that allows the reporter to write numbers and alphabets the same way whether writing normally, in "stitch-mode/spell-mode" or whether writing currencies (of any sort) or numbers (whether telephone numbers, identification numbers like Social Security numbers, etc.), hyphenated numeral/word combinations, and to define for the local requirements what the thousands separators and decimal indicators should be.

If you are currently working on a Passive CAT system, you may not fully grasp the implications or benefits of what such a different approach in CAT design could do for you. If you are fortunate to have purchased an Active CAT system as your first CAT software, you'll never fully appreciate what you've got vis-a-vis other CATs. If you've "been there and done that" and now have a product like Eclipse, you

probably don't need to be told that you'll never settle for a passive software partner in business again.

In my opinion, no CAT system is perfect, there's always room for improvement. However, a product that has had the benefit of continuous development and improvement year after year is by design and evolution going to be a much more sophisticated and feature-rich program than one that is reinvented every couple of years.

You put so much effort into your own work, into your skill development and into your future. Isn't it time you placed greater demands on the software you use?