writing would indeed be bleak. A sharper reading of what I wrote will reveal the exact opposite of her claims of harsh criticism and unsuitable evaluative criteria. Nowhere did I ask for perfection, nor would I of any book. Apart from some concerns I had of a technical nature, which I thought disserved the manual's purpose, my chief observation was that it generally needed livening up. I found it heavy and dull in style and presentation — as I do the *Manuel d'archivistique* and Schellenberg's classics. As for "perversity," Ms. Boulet-Wernham might note that the term was being applied, not to the book, but to the reviewer's own naughtiness in requesting a lighter, spritelier treatment. Her citation of recent sales success hardly depresses that wish. I see no good reason for not expecting archival writing (manual or otherwise) to be engaging and useful, though I would probably draw the line at so strong and highly pitched a word as "thrilling."

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Data Base Management Sytems to Access Archives

The article "Toward Intelligent Databases" by Sunden and Winchester in *Archivaria* 14 was a welcome sight for two reasons. Not only does it demonstrate the increasing interest in the use of the computer as an historical tool, but it will perhaps also serve to stimulate greater interest.

The distinction between databases and other conglomerations of computerized data is well made. Differences of terminology can be a rich source of misunderstanding in communication between humanists and computer scientists. However, it should perhaps be pointed out that the technical people tend toward a range of definitions for the term "database" even more restricted than that sketched by the authors. Although there are many definitions, the concept of "database" is broadly held to refer to a fairly large and complex quantity of data stored on-line (i.e., upon a storage device which can be accessed by the computer without having a human move something) and managed by a complex and sophisticated "software" package called a Data Base Management System (DBMS).

It is in the DBMS that we shall see increased "intelligence" and more powerful and easily used tools to access the databases of interest. Since Data Base Management Systems are used for many administrative purposes, historians need not fear that the development of such improved tools will depend solely upon the budgets of History Departments and special grants. Of course, there have also been efforts to develop software especially for the historian. A good example of this is provided by CLIO, a DBMS developed at the Max-Planck-Institut für Geschichte. A noteworthy feature of this DBMS is a command language based upon Latin.

This brings us to the potential of being able to address the DBMS using "natural" language. Recent research suggests that the great inconsistency with which people use words makes this an elusive goal. Not only will people use different words for one particular thing, but one word to mean several different things. People seem to find it easier to remember commands if the words have existing meanings which appear related to the several tasks. However, the need for precision would discourage the use of words which would have such broad meanings as to encourage inappropriate use. The result of all this is that the historian, at least in the short term, will find

himself talking to the computer in a fairly precise jargon with specific meanings attached to words. The dialogue may look "natural" to an observer, but will require at least a modicum of learning effort on the part of the novice user.

All in all, as the authors point out, we are likely to see historians making increasing use of computer data bases by means of Data Base Management Systems which grow increasingly powerful and easy to use.

R.L. Schnarr Machine Readable Archives Public Archives of Canada