

Analysis of Abbyy 8 accuracy, normal vs. -fast

Hank Bromley

29 November 2007 (revised 3 December 2007 to include a small number of additional errors)

In order to get an approximate sense of how much accuracy is lost in shifting from normal mode to ‘-fast’ mode in Abbyy 8, I ran a small sample of pages under both modes and compared the results. The samples came from three different books, and the results varied significantly, both across books and across pages within a given book. (In fact, the first page I ran showed *better* results under ‘-fast’.) Given the variability, and the small sample size, these results should be seen as only a rough indicator of what to expect. In particular, I didn’t include any books with especially small print or unusual typefaces, nor any non-English books, so it’s hard to predict what will happen with those.

The results are summarized in the table below. **On the average, ‘-fast’ mode produced just about twice as many errors as normal mode.** In general, the error rates are fairly low (1 out of every 350–700 characters), with some pages nearly perfect.

Following the summary table are the actual OCR results, shown side-by-side, with normal on the left and ‘-fast’ on the right. Each mode read correctly some characters that the other mode missed. Where the two differ, the mistaken results are shown in red and the correct results in blue. Errors made by both are shown in purple. (Other misspellings are not marked at all because they were actually in the originals, and read “correctly” in both modes.)

A separate document has reduced versions of the actual page images. I thought putting those in a separate document would make it easier to view the images and OCR results simultaneously.

SUMMARY OF RESULTS			
leaf	errors in normal ocr	errors in -fast ocr	Notes
departmentalbull00nortuoft			
0004	4	6	
0005	2	5	
0006	2	1	the only error in -fast was misreading a double quote as two single quotes
newvarietyofcret3716rich			
0009	1	1	
0012	7	8	these were nearly all repeats of a single error (misreading the abbreviation “pl.” as “pi.”)
Jewishproblemhow00branrich			
0006	4	13	this was the only book for which -fast was significantly worse; there was quite a bit of
0009	1	7	broken type on the left side of the pages, to which -fast may be less resilient
totals	21	41	
errors per page	3.0	5.9	
errors per 1000 chars	1.4	2.7	15,000 characters total, or ~2000 per page

departmentalbull00nortuoft, leaf 0004

The U n i v e r s i t y

OF NORTH DAKOTA

ESTABLISHED IN EIGHTEEN HUNDRED AND EIGHTY-THREE

FRANK L. McVEY, Ph. **P.**, LL. **P.**, President

Grand Forks Bismarck Hebron

University **P**evils Lake Minot

1. **T**he College of Liberal Arts offers to men and women programs of study leading to the degree of Bachelor of Arts which may be begun in September or February.
2. The School of Education prepares for the profession of teaching in secondary and higher schools. Its graduates receive the degree of Bachelor of Arts and the Bachelor's Diploma in Teaching. The Model High School is maintained by the School of Education as a place of observation and practice.
3. The College of Law offers a three-year course and grants the degree of Bachelor of Laws.
4. Courses of Study leading to degrees of Mining Engineer, Electrical Engineer, Mechanical Engineer and Civil Engineer are offered in the School of Mines and the College of Mechanical and Electrical Engineering.
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order for two years in medicine based upon two years of college work. A certificate in medicine is granted with the A. B. degree.

6. The Graduate Department presents advanced courses of study leading to the degree of Master of Arts.

7. The Summer Session provides college and elementary courses for students and teachers.

8. Extension Lectures and Courses of Study are offered by the University for persons otherwise unable to receive academic training.

9. Laboratories and Stations are maintained at University, Devils Lake, Bismarck, Minot and Hebron, North Dakota.

Information regarding colleges and departments may be obtained by addressing the Registrar of the University, University, North Dakota.

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UNIVERSITY OF NORTH DAKOTA
DEPARTMENTAL BULLETINS

Library February, 1917 No. **I**

STATE-WIDE USE OF THE UNIVERSITY
LIBRARY

BY

UNIVERSITY OF NORTH DAKOTA
DEPARTMENTAL BULLETINS

Library February, 1917 No. **1**

STATE-WIDE USE OF THE UNIVERSITY
LIBRARY

BY

Clarence Wesley Sumner, B.A.,
Librarian, University of North Dakota

The spirit of modern library development becomes more and more truly a spirit of large and far-reaching service; a spirit of sincerity in attempting to meet some of the real needs of men and women and to instill into the hearts of boys and girls such a love for books that they may be led into the habit of good reading. We believe that every community owes it to itself not only to have a library but to have a library that is in truth a living, vital force in the community. Much has been said concerning the library of yesterday, the librarian of which was seemingly content with collecting and preserving books. Librarians of today still believe it to be their duty and privilege to be constantly gathering into libraries good books and many valuable sources of information, but not that they may be locked up in cases and carefully guarded ; not even that they may be ready for service and usefulness in time of need, but that they may be, in so far as possible and practicable, sent into the homes and put into service.

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Librarians are coming to see more clearly the possibilities of their profession and to look upon their work as something more than routine, essential as routine is in every library. They are coming to realize that there is truth in the statement that the real test of the value of the library is in its use, that the truly useful library is far more than a building furnished with book-shelves and stocked with row after row of books, that it is in deed and in truth, as some one has said, "an active, potential force in the community, which reaches out and touches and quickens the lives of individuals in the community, developing and enriching those lives in every possible way."

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Such is the spirit of present-day library development. No one can deny, however, if we are to judge from work accomplished and lines of service extended, that the spirit of modern library development would seem to pertain more to the public library than to that of the college and university. The development of the latter, all librarians know, has not kept pace with that of the former. It has been too much the tendency of such libraries to serve only their own immediate communities the student bodies and the faculties. This is due, no doubt in a large measure, to the entirely inadequate support that it receives. It would seem that university authorities have sometimes failed to recognize the real function of the university library, the larger scope and function of its activities, the multiplicity of detail connected with its administration. They have failed to see that the library is really an institution in itself, with great possibilities for state-wide service and that, as such, it should receive liberal financial support; and we have the conviction that the fault lies partly with the librarians in not making the influence of their libraries felt more in the state at large in not putting them upon a plane which will command the respect which justly belongs to them.

Granting that the first function of a university library is to meet the demands made upon it by its students and faculty, is there not another important field of service, lying at its very door, which could be developed if sufficient support were given to it? We refer to a state-wide service in the matter of providing a source of general information and dissemination of knowledge that would benefit the en-

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A New Variety of Cretaceous Decapod

from Texas

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Eugene S. Richardson, Jr.
Curator of Fossil Invertebrates

Fragments of the large crustacean, *Enoploclytia walkeri* (Whitfield) are not infrequently reported from Texas. Localities are listed by Stenzel (1944, p. 421) and by Rathbun (1935, p. 23, as *Palaeastacus walkeri*), in the Fort Worth and Weno limestones of the upper Albian, near the summit of the lower Cretaceous. The geographic distribution as now known is within the outcrop belt of these rocks and extends for about 250 miles from Denton County on the north to Bexar County on the south.

The specimen discussed here was collected by Karl P. Schmidt and Billy J. Anderson near the Bosque-McLennan County line, a few miles north of China Springs, about in the middle of the known distributional range of the species. The specimen had weathered free but was found still in place in its impression on a massive ledge outcropping on the gently rolling upland surface of the Washita Upland (Grand Prairie). With it was associated an echinoid.

Order Decapoda

Family Erymidae

Genus *Enoploclytia* McCoy 1849

Enoploclytia walkeri, var. *schmidti*, var. nov. Figure 108.

Type specimen. Chicago Natural History Museum no. P29710.

Description. The specimen collected by Schmidt and Anderson consists of the fingers, palm (manus), wrist (carpus), and part of the arm (merus) of an individual of the same size as the holotype and slightly larger than the Weno specimen figured by Stenzel (1944, p. 38); all are right chelipeds. The fixed finger is almost entire and is somewhat longer in relation to the length of the cheliped than in the Weno specimen referred to above; Whitfield's

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jewishproblemhow00branrich, leaf 0006

THE JEWISH PROBLEM:

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part of the group is essential to the full enjoyment of rights by the individual. For the individual is dependent for his development (and his happiness) in large part upon the development of the group of which he forms a part. We can scarcely conceive of an individual German or Frenchman living and developing without some relation to the contemporary German or French life and culture. And since death is not a solution of the problem of life, the solution of the Jewish Problem necessarily involves the continued existence of the Jews as Jews.

Councils of Rabbis and others have undertaken at times to prescribe by definition that only those shall be deemed Jews who professedly adhere to the orthodox or reformed faith. But in the connection in which we are considering the term, it is not in the power of any single body of Jews or indeed of all Jews collectively to establish the effective definition. The meaning of the word Jewish in the term Jewish Problem must be accepted as co-extensive with the disabilities which it is our problem to remove. It is the non-Jews who create the disabilities and in so doing give definition to the term Jew. Those disabilities extend substantially to all of Jewish blood. The disabilities do not end with a renunciation of faith, however sincere. They do not end with the elimination, however complete, of external Jewish mannerisms. The disabilities do not end ordinarily until the Jewish blood has been so thoroughly diluted by repeated intermarriages as to result in practically obliterating the Jew.

And we Jews, by our own acts, give a like definition to the term Jew. When men and women of Jewish blood suffer because of that fact and even if they suffer from quite different causes our sympathy and our help goes out to them instinctively in whatever country they may live and without inquiring into the shades of their belief or unbelief. When those of Jewish blood exhibit moral or intellectual superiority, genius or special talent, we feel pride in them,

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jewishproblemhow00branrich, leaf 0009

HOW TO SOLVE IT

that by such domination only, does civilization advance. Strong nationalities assume their own superiority, and come to believe that they possess the divine right to subject other peoples to their sway. Soon the belief in the existence of such a right becomes converted into a conviction that a duty exists to enforce it. Wars of aggrandizement follow as a natural result of this belief.

This attitude of certain nationalities is the exact correlative of the position which was generally assumed by the strong in respect to other individuals before democracy became a common possession. The struggles of the eighteenth and nineteenth centuries both in peace and in war were devoted largely to overcoming that position as to individuals. In establishing the equal right of every person to development, it became clear that equal opportunity for all involves this necessary limitation: Each man may develop himself so far, but only so far, as his doing so will not interfere with the exercise of a like right by all others. Thus liberty came to mean the right to enjoy life, to acquire property, to pursue happiness in such manner and to such extent as the exercise of the right in each is consistent with the exercise of a like right by every other of our fellow citizens. Liberty thus defined underlies twentieth century democracy. Liberty thus defined exists in a large part of the western world. And even where this equal right of each individual has not yet been accepted as a political right, its ethical claim is gaining recognition. Democracy rejected the proposal of the superman who should rise through sacrifice of the many. It insists that the full development of each individual is not only a

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right, but a duty to society: and that our best hope for civilization lies not in uniformity, but in wide differentiation.

The movements of the last century have proved that whole peoples have individuality no less marked than that of the single person; that the individuality of a people is irrepressible, and that the misnamed internationalism which seeks the obliteration of nationalities or peoples is unattainable. The new nationalism proclaims that each race or people, like each individual, has a right and duty to develop, and that only through such differentiated development will high civilization be attained. Not until these principles or nationalism, like those of democracy are generally accepted, will liberty be fully attained, and minorities be secure in

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