

A FIBONACCI “WHACK” ALONGSIDE THE HEAD: MY JOURNEY INTO THE WORLD OF BOOK COLLECTING

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It was September of 1967; I was a Sophomore Computer Science major at Brown University. Taking a study break, I noticed that our dorm parents were offering a free sherry hour, with something called a meet and greet. For a glass of sherry, I figured I could meet just about anyone.

Tom Adams, the head of the John Carter Brown Library (JCB) of Americana, was the guest of honor and he gave, what I recall, was a most boring talk about the first pamphlets printed in North America. As I was leaving, Mr. Adams approached me and said, “I see by your expression that you were not very interested in what I had to say.” I apologized and said that as a Computer Science major, I had no real interest in Americana or in pamphlets. At that point I thought he’d just let me escape back into my computer lab, but no, Mr. Adams came back with, “so what *is* of interest to you?” At the time we were writing in some abstract computer hexadecimal language and the assignment was to read in a number n and then generate the n th Fibonacci number. Pretty basic stuff, even for back then. So I replied to Mr. Adams, “we’re generating Fibonacci numbers,” and before I could escape he hit me with a series of questions: “Who was Fibonacci?” “When did he live?” “How did he discover his number series?” “Of what significance are those numbers?” “Did Fibonacci do anything else?” “How did he influence his generation and generations after him?”

To each of his questions I could only meekly respond, “I don’t know.” (I had never thought about the man, just the mechanics of generating his numbers.) That was when Mr. Adams gave me one of the greatest wake-up calls that I have ever received. He smiled, then after listening to my string of non-answers he calmly said, “I don’t think I have ever met a more uninteresting student at Brown. How did you ever get in here?” **Whack.** I was dumbfounded. Was I so narrowly focused on my major that I was missing out on other adventures? Was there more to life than the computer lab?

The next morning I went to the JCB to investigate what I was missing. In those days we did not have Google, and I needed a lesson or two on how to find the answers to Mr. Adams’ most basic of questions. Sam Hough came forward and taught me how to research Fibonacci.

First I learned the most basic information I could about Fibonacci (aka Leonardo Pisano). He lived around 1200; his father brought him to Northern Africa where he learned about Arabic numbers. Then he brought those numbers back to Europe and wrote the first European practical arithmetic book, *Liber Abacci*. I found out about the math contest in which the answer to one of the problems was his famous number series, and I began to appreciate many of the interesting ways his number series appears in nature.

THE FIBONACCI QUARTERLY

Next, I went into the bowels of Brown's John Hay science library (open stacks back then) and found that Brown had many books about Pisano, most of which were published in the mid-1800's by a fellow named Boncompagni. I started to enjoy the hunt of finding out who Boncompagni quoted and then being able to go back in time and find the actual book to which he had referred. Before long, I was holding in my hands older and older books. I began to marvel at the softness of 200, 300, 400 and even 500 year old paper. I began to daydream of what it must have been like to learn arithmetic from those texts. I started reading *The Fibonacci Quarterly* and even submitted solutions to some elementary problems!

My mission became clear. Fibonacci was the greatest mathematician of his time. But he himself was pretty much lost until Boncompagni republished his works in the 1850's. How did his memory survive for 650 years? My goal would be to learn how Fibonacci was passed on from generation to generation until he landed in Boncompagni's book case. This would be quite a challenge since there are no Fibonacci books back in time, but rather references deep within other books where he might be mentioned. I would become a Fibonacci detective.

As I pieced together how Fibonacci was handed down in history, I began to create a want list aided by the extensive Brown math library. To help me in my quest, Sam Hough suggested that I write to some book dealers and see if they had any old books that mentioned Leonardo Pisano. I sent out postcards and began getting catalogs. To my surprise, one of the first catalogs I received was from a New York book dealer who was offering a Boncompagni book *Intorno ad alcune opere di Leonardo Pisano Matematico del Secolo Decimoterzo notizie raccolte da Baldassarre Boncompagni*. The price was very cheap because the dealer said the bound volume had thousands of ink notations throughout. The book dealer also claimed that it was printed in 1853.

From my research at the Hay, I knew that the first edition of this book (which Brown owned) was dated 1854. Was it a hoax? I decided to buy the book and when I got it I discovered that it was indeed dated a year before the first edition. It was the page proofs that Boncompagni had printed and bound. The ink and handwriting was Boncompagni's (it matched dedications on other Boncompagni books at Brown), and his hand written corrections in my copy appeared corrected in the first edition. To make it even more interesting, my copy had 40 pages of wonderful bibliographic information that Boncompagni wanted to share with the world, but later, decided to drop from the first edition.

When my mentor, Mr. Hough, learned of my extraordinary page proofs find, all he could say was, "You will never again find such a rare and wonderful book." For the next dozen years, Sam was right. But I continued my Fibonacci quest. I bought several Boncompagni books and other texts by the people who had influenced him.

Along the way I found some other fascinating books. Remember the logic problem: A farmer has a fox, goose, and some barley and he has to row them one by one across the river but can't leave the fox alone with the goose or the goose alone with the barley. The problem was first published in 1546 in Cataneo's *Le Pratiche Delle Dve Prime Matematiche*. I purchased the third edition (1567) because I found in its introduction mention of the great contributions of Euclid and Pisano to mathematics!

A FIBONACCI “WHACK” ALONGSIDE THE HEAD

My senior year I had the privilege of meeting Mr. Albert Lownes. He loved his books and especially loved to have guests hold them and feel real history in their hands. He let me hold one of his rare million dollar Audubon Elephant Folios. He showed me his rare first edition of a book which even Ian (James Bond) Fleming couldn't find for his Printing and the Mind of Man exhibition, and he pulled out dozens of other books that brought history to life for me. He taught me the valuable lesson that old books are to be held and shared.

Several years later, after I had left Brown, Sam Hough called me with incredible news. He explained that Boncompagni had assembled 361 manuscripts in his private library. Only two of them were about Fibonacci. One of those Fibonacci manuscripts was for sale! I immediately purchased it, and my wonderfully understanding wife and I ate peanut butter and jelly sandwiches for a year.

Brown had a History of Math Department book. This fabulous manuscript has been on loan to the university for the last 30 years. Brown has recently closed that department, so it is now time to let others hold and enjoy this treasure. Mr. Lownes would not approve of me locking it away in some vault until I die, so I have decided to sell it. It needs to be back in circulation where it can be held and shared. Despite its sale, I will continue on my life long quest to discover how Pisano has been remembered throughout history. I am very grateful to Tom Adams for his “whack” alongside my young head. My fondest wish is that you will be fortunate enough to get such “whacks” alongside your head to inspire new journeys in your life.

About the Author:

Jeff Bergart got his ScB in Applied Mathematics from Brown University in 1970; his MSEE and MBA from the University of Pennsylvania and Wharton; and a CPA while at Coopers & Lybrand. Now a part-time CFO, he spends many hours volunteering his time and pursuing his hobbies as a book collector, a FIFA Soccer Referee, and a Justice of the Peace.

Of special interest to Fibonacci Quarterly readers, as he downsizes the physical size of his Fibonacci Library, Jeff will also be parting with his 45 bound volumes of the *The Fibonacci Quarterly* from 1963 to 2010. Information regarding the auction can be found at:

<http://www.bonhams.com/usa/booksusafibsale>.

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