

A photograph of a large, two-story house with a wide, wrap-around porch. The house has white siding and two prominent brick chimneys. The porch has white railings and is supported by white columns. The house is surrounded by lush green trees and a grassy lawn. A person is visible walking on the lawn to the left of the house. The text "The Multi-Dimensional Clopper Almon, Jr." is overlaid in white on the upper part of the image.

The Multi-Dimensional Clopper Almon, Jr.

A Tribute, and Recollections



The Early Days of Clopper

- Born January 25, 1934, in Nashville, Tennessee.
- Grew up in Sheffield, Alabama
- Lived near the Tennessee River, with lots of swimming, fishing and hiking.

- His father's original name was George Clopper Almon, but he dropped the "George" in WWI.
- So, Clopper became Clopper Almon, Jr. with no middle name. His mother was Louise Evans Howell.



High School in Sheffield

- Clopper started playing the bass horn in 7th grade, although his mother insisted “he has no musical talent”.
- Later, in the army, he bought a baritone horn, which he still played for many of his guests over the years.



- His favorite subject in high school was Latin, but after taking the two years that his school offered, he studied French from a teacher from Brittany. This was the beginning of a long love affair with languages.
- Clopper had no enthusiasm for mathematics until 11th grade, when he studied plane and solid geometry. The teacher let him progress at his own speed, then progressing quickly through trigonometry and college algebra.
- I inherited his original geometry textbooks, and they show signs of intensive use!
- Clopper's mother passed away when he was only 18.



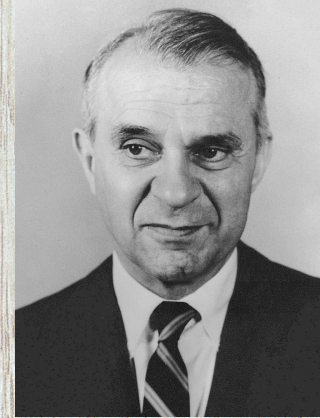
Nashville to Cambridge

- Clopper went to Vanderbilt College in Nashville, where his major was economics, but took enough hours of math that it could have been his major.
 - He avidly studied Russian, then took German in an intensive summer course after his sophomore year.
 - Clopper enrolled in the ROTC during college, to be able to defer the draft (this was during the Korean War).
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- Rather than serve immediately, Clopper was given a one year deferment after College, and he proceeded immediately to Cambridge, MA, to study economics at Harvard University.
 - At Harvard, his favorite course was mathematical economics, with Robert Dorfman. In this course they worked through Paul Samuelson's *Foundations of Economic Analysis*.
 - In the Fall of 1957, Clopper entered the Army, and also got engaged to his sweetheart, Shirley Montag.
 - Thanks to his intensive study of Russian, he got to work with that part of the CIA that studied the Soviet economy. This job also furnished him the opportunity for a course in speaking and listening to Russian. His office was overlooking the Potomac River, exactly where the Kennedy Center now stands!



Harvard, Shirley and work with Wassily Leontief

- Shirley and Clopper got married on June 14, 1958.
- Returning to Harvard in Fall of 1959, Shirley set to work on her thesis, which included the development of the 'Almon lag'.
- Clopper got a job with professor Wassily Leontief, and was looked upon as 'the programmer' for the Harvard Economic research project.



- Clopper was able to solve the Leontief dynamic system using a FORTRAN simulation program, on the IBM 7094.
- Work on his thesis was helped by a grant to study at the California Institute of Technology in the Summer of 1961, and the thesis "Consistent Forecasting in a Dynamic General Equilibrium System" was completed in September, 1961.
- While at Harvard, he published two books: *The American Economy to 1975*, which explained the structure and usage of the model which grew into the INFORUM model, and *Matrix Methods in Economics*, compiled from class notes from his Mathematical Economics course.

From Cambridge to College Park

- Clopper was an assistant professor at Harvard from 1961 to 1966. He accepted an offer with the University of Maryland.
- Shirley started with the President's Council of Economic Advisors.

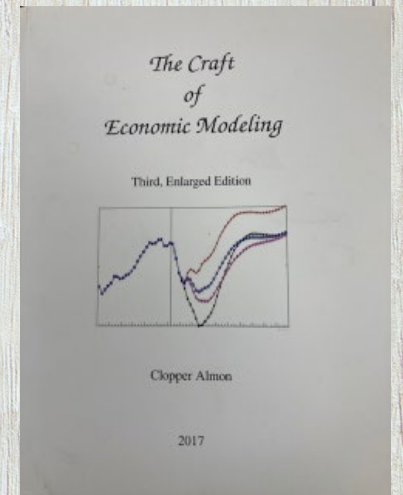
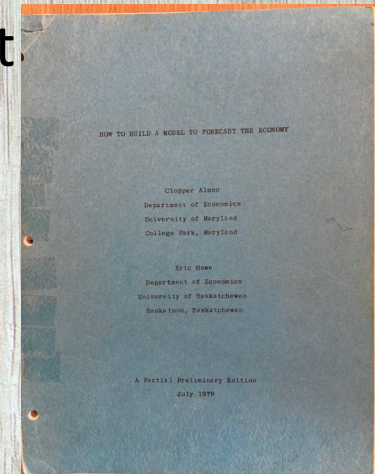
- They found a house they loved on 7303 Dartmouth Ave, College Park, which many of you know well.
- *Business Week* reviewed Clopper's book *The American Economy to 1975*, and this was followed by a 4-page article on Clopper's forecasts.
- This exposure brought in quite a number of business subscribers, and the Maryland Interindustry Forecasting Project (MIFP) was off to a running start. In 1971, the Interindustry Economic Research Fund (IERF) was incorporated, and MIFP was changed to INFORUM.
- Consulting and subscriber revenue supported visiting international researchers and many of Clopper's PhD students.





Teaching at Maryland and Early Software Development

- The only computer available at this time at the University of Maryland was a large mainframe, a Univac 1103.
- Inforum researchers and international guests needed to write programs in FORTRAN using keypunch machines, and take the card decks across campus to be run at computer center.
- Clopper taught graduate microeconomics and mathematical economics for many years, introducing students to matrix algebra, multi-variable optimization, linear and non-linear programming, and full and partial differential equations, topics which had not been taught before in the Maryland economics department!
- He also developed FORTRAN software to estimate and build quarterly macroeconomic models, which he used in an undergraduate course, which he taught for nearly 35 years.
- Clopper once told me that, for a period in the early 70s, Clopper, his students, and Inforum accounted for more than 90% of the usage of the University computer in the social science departments!



Rudolf Steiner, Anthroposophy and the Waldorf School

- Parallel to his work in economics, Clopper became interested in the teachings of Rudolf Steiner, known as *Anthroposophy*.
- The reading and study of Steiner contributed greatly to Clopper's views on education, and indeed to the practice of economics and economic modeling as well.
- In 1974, Clopper worked with other academics who were interested in Anthroposophy to establish a summer program of study called the Rudolf Steiner Institute.
- One of the many contributions of Rudolf Steiner was the creation of the Waldorf method of primary and secondary education. Clopper was active in the Waldorf movement, and helped form the Washington Waldorf school in Bethesda.
- Clopper met Joan Wolfsheimer through his Waldorf school work.
- He published two study guides to Steiner, and held Anthroposophical study groups at his house for many years.

A Study Companion to
AN OUTLINE OF
**ESOTERIC
SCIENCE**
CLOPPER ALMON

A Supplement to Rudolf Steiner's
CLASSICS IN ANTHROPOLOGY





The 1970s: Shirley's Death, Marriage to Joan, INFORUM Development

- After only two years at the Council, Shirley started having dizzy spells, and was diagnosed with cancer. She died in 1975 from a brain tumor.
- Clopper was devastated, and buried himself more deeply into his work, and the activities with the Waldorf School and the study of Steiner.
- He and his friend Joan Wolfsheimer grew closer, and were married on October 10, 1976.



- At INFORUM, Clopper and Doug Nyhus were working on a system to link the US model with models of other countries, developed using common software and a common approach.
- The FORTRAN modeling system was called SLIMFORP, and the linked system became known as the INFORUM Bilateral Trade Model (BTM).
- Early researchers included graduate students Young Sun Lee (developed models of Japan and other countries), Patrick Henaff (France), visiting researchers who became close friends such as Josef Richter (Austria) and Maurizio Grassini (Italy).
- Clopper, Josef, Maurizio and others became involved in a project at IIASA contributed greatly to the development of input-output modeling, and east-west co-operation. Clopper also developed close ties with Dr. Władysław Welfe of Poland, and Yuri Yurimenkov of Russia.
- In 1979, Clopper and Doug Nyhus made an extended visit to IIASA. Work began on the construction of Inforum models of Poland, Russia, East Germany, Czechoslovakia, Hungary and Bulgaria.



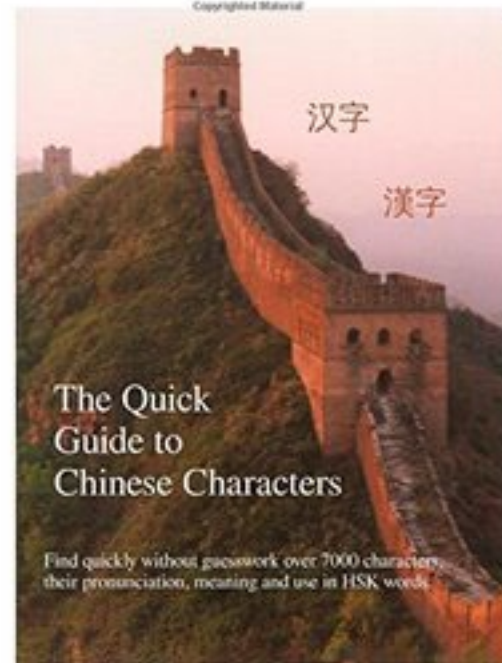
Chinese Studies



- In Summer 1986 Clopper, Doug Nyhus, Doug Meade and Cindy Clement made a month-long trip to China, to give courses on Inforum modeling at the main headquarters of the National Bureau of Statistics, as well as in Chengdu, Xian and Guangzhou.
- Under Clopper's orders, we all had to take an intensive course in Chinese reading, writing and conversation before traveling.
- Clopper became fascinated with Chinese characters, and bought many books including Chinese dictionaries, etymologies, origins of characters, and related studies.
- He was frustrated with the organization of Chinese dictionaries, particularly for Westerners trying to learn the language.
- He developed a hybrid system called *Radicode*, which organized the characters by the first part, which was usually a radical, and a second part, which was a number encoding the strokes.
- Helped by Chinese graduate students and visiting researchers, including Wang Yinchu and Pan Shengchu, he developed a dictionary, called *The Quick Guide to Chinese Characters*.
- In 2017, he wrote *Chinese Character Stories*, which delved into the origins of some more commonly used characters.

Chinese Character Stories for Adult Beginners

a Character Study Companion to
Yong Ho's
Beginner's Chinese
and
Intermediate Chinese
Clopper Almon





International Partners and INFORUM World Conferences

- The International Input-Output Association was formed in 1988, but the first International IO Conference was in 1950 (Driebergen, Netherlands).
- The formation of the Association roughly coincided with the establishment of the academic journal *Economic Systems Research*.
- The 1989 Conference was held in Keszthely, Hungary, and Clopper was asked to plan several INFORUM sessions. These were joined by INFORUM colleagues from Italy, France, Spain, Austria, China, Poland and Germany. A special issue of ESR was devoted to papers from these sessions, in 1991.

- The next IIOA conference was held in Sevilla, Spain in April 1993. At this conference Clopper arranged an INFORUM dinner, to which many INFORUM partners and friends were invited.
- We decided to hold an annual INFORUM World Conference, the first one to be held in Rennes, France, hosted by Paul Salmon (pictured above with Clopper at Sevilla).
- There have been 27 in-person conferences, the last one in 2019 in Sochi, Russia. In 2021, a virtual conference was held. Mallorca will be the 29th conference.



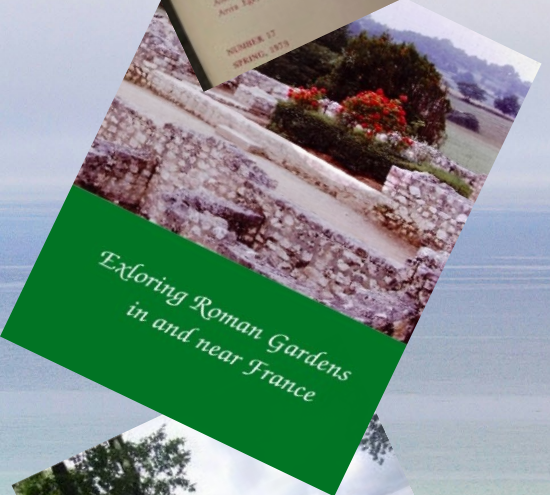
G and Interdyme

- The C language appeared on the world stage in 1969, but it was not until the birth of the IBM PC in 1981 and the DeSmet C compiler in 1983 that Clopper became excited about the possibilities of C.
- The early versions of the *G* regression and model building program were written quickly, thanks to late nights working with grad students and visiting researchers.

- During an extended visit by Paul Salmon, SLIMFORP was converted to structured FORTRAN, only to be soon rewritten in C.
- With the arrival of Turbo C++, Doug Meade and Clopper began learning C++, and developed the first components of *Interdyme*, which included classes for Matrix, Vector, Tseries (macrovariables), Equation, and other model building objects. This was first presented at the Sevilla IIOA conference in 1993.
- The Mudan model of China was the first to be composed in *Interdyme*. This was followed in quick succession by many other models, developed during Clopper's research visits abroad, or other visits to INFORUM.
- The arrival of Windows 95, Borland C++ Builder and larger memory models encouraged the development of a Windows version of *G*, christened *G7*.
- *G7* and *Interdyme* are still under continuous development at INFORUM.

Other Work

- Clopper published several papers in the *Journal for Anthroposophy*, including “The Geometry of Notre Dame de Chartres” and “The Spell of the Mask of Tutankhamun”.
- He worked with Wilhelmina Jashemski to publish her work on Roman Gardens.
- Clopper had a winter term course to Italy, and his favorite destination was Ascea, the location of the ancient Velia, where also the 2004 Inforum Conference was held. He wrote a book on the history and geology of this area.
- The title slide of this deck shows the summer home in Beersheba Springs of Clopper’s mother’s extended family. He wrote several books on the history of this area.
- *The GWX Story*, shown at right, is an unfinished work of Clopper’s project to make a platform-independent version of *G*, which would run on Windows, Linux and Mac. The book is called “A Biography”.



Clopper and Judy



- Joan Almon was one of the leading members of the international Waldorf Education Association.
- She visited existing Waldorf schools in many countries, gave talks, and helped to set up new schools. Clopper mused that he traveled to as many countries accompanying Joan as he did for his own work!
- In early spring, 2019 Joan was diagnosed with pancreatic cancer. She died July 14, 2019.

- Judith Blatchford had known Joan well through the Waldorf school and Eurythmy.
- After Joan died, she sent Clopper a letter of condolence, to which he responded.
- After Emails and visits, Clopper and Judy were married, on November 12, 2020. Clopper moved to Chestnut Ridge NY to live with Judy at the Rudolf Steiner Fellowship Community.
- They had four rich and beautiful years together.
- Clopper passed away on May 17, 2024 after a short walk with Judy around the grounds of the Community.



Data Stick for Clopper Almon Tribute

1. ClopperRecollections – A “scrapbook” of recollections from many friends and colleagues.
2. ClopperInterview – Interview with Clopper about his time with Wassily Leontief, May 15, 2014.
3. ClopperBirthdayTribute – Video tribute assembled by Karolina Syrovatkova on Clopper’s 90th birthday.
4. ClopperThesis – A preliminary version from June 1961, and the final version from September 1961.
5. Historical - A miscellany of interesting historical materials.
6. WikipediaDraft – Draft of Wikipedia article, still working on review. To view online, go to <https://Wikipedia.org>, and type ‘Draft:Clopper Almon, Jr.’ in the search bar.
7. ClopperPapers
8. ClopperBooks
9. PPT – This presentation.

