## **Eugene Garfield – an obituary**



The personage whose obituary I am writing, was a prodigy extraordinaire. Apart from being a distinguished library and information scientist, he was a famous scholar, well-known teacher, prolific essayist, accomplished speaker, consummate salesman, connoisseur of fine art, devoted saxophonist, multilinguist par excellence and also an inventor. According to Ms Meher Garfield, his constant companion for over a decade, "Gene was a wonderful human being – kind, generous, intelligent, hardworking and humble till the end. He always treated his employees as his extended family. I miss him dearly".

Eugene was born in the Bronx, New York city on 16th September 1925 in a middleclass Jewish family. As ill luck would have it, when Eugene was yet to be born his father Henry Garfinkle left the family. It may be noted that Eugene became known in the world as Garfield and not as Garfinkle. His teenaged mother, Edith (nee Wolf),was supported by her

brother who, with his brothers and father ran a coat manufacturing company. Edith did various jobs to supplement the financial help so she could look after Eugene and his sister Sylvia, who was two years older than Eugene. As Eugene grew up, he started doing small jobs to supplement his mother's income. Once he worked in a laundry, sometimes in a grocer's shop, and so on. At various times in his life he worked as a welder in a shipyard, and a cab driver, etc.

As children, Eugene and Sylvia went to a daycare center while their mother went to work. He was admitted to the prestigious Stuyvesant High School based on his science and math scores but decided to switch over instead to DeWitt Clinton for several reasons. Going to Stuyvesant involved a long commute, he could not find a good mentor there and they did not offer courses in languages. During his educational career, he wasn't an exceptional student but he did complete his grammar school one year ahead of the usual age. Once his uncle took him on a holiday during the school year. Consequently, he failed in two subjects including history. He had to make up for these subjects by taking classes in the summer and so he pragmatically chose easy courses like typing, office practice, book keeping and so on. His learning of typing made him a supertypist at a later date. His undergraduate education was never a smooth sailing. At University of California, Berkeley while taking pre-med courses he met his first wife, Faye (Byron). Before long they got married and had their son Stefan. Faye left Eugene while Stefan was just a few months old. This was the most difficult time for him. At this point of his life he was to raise Stefan, earn his livelihood, and continue his studies so he went back east and joined Columbia University. He paid for his college tuition with benefits from the GI bill and driving a cab at night. He graduated in Chemistry from Columbia University in 1949. He obtained his Master's degree in Library Science from Columbia University in 1954 as one of the top students in the class. In 1955 he started his PhD work at the University of Pennsylvania under Zelig Harris. Professor Alan Day was his advisor. The title of the thesis was - An algorithm for translating chemical names to molecular formulas. He obtained his doctoral degree in 1961.

Eugene had the knack for teaching. He taught at the University of Pennsylvania for a few years, but he could not continue it for long since he was also running his own company. He had the knack of invention as well. He filed a patent in 1958 on a copying and reproducing device called 'Copywriter'.

For bringing out publications and other activities he needed an office. Eugene married Winnifred (his second wife) in mid-1950s. After the marriage, for sometime they lived in Woodbury, New Jersey, and thereafter shifted to Thorofare, New Jersey where they rented a log cabin. On the property was a chicken coop which Eugene converted into his office and named it Eugene Garfield Associates. Gradually, Garfield's business expanded and became the Institute for Scientific Information, popularly known as ISI. Initially it was in a rented building and thereafter shifted to its own building which Eugene decorated with Huichol art.

Eugene's publishing activity took a variety of forms such as essays, current awareness services, indexing periodicals, citation indexes, dictionaries, directories and so on.

He penned around 1300 essays which are included in his 15-volume book, titled *Essays of an Information Scientist*. They cover around 1000 subjects touching upon practically all broad areas of knowledge.

The essays include a large number of biographies, learned periodicals and numerous comprehensive articles on medicine especially diseases. In these essays one can find the list of most/highly cited authors, articles, books, journals and scientists; citation classics; description of citation indexes; Nobel Prizes; Institute for Scientific Information (ISI); journal citation studies; ISI services, publications, software, information retrieval tools, etc.

In the essays we come across a number of concepts like citation amnesia, citation laureate, immediacy index, impact factor, milestone paper, primordial paper, research front, etc. Needless to say, all are the brainchild of Eugene.

Eugene dreamt of bringing out a current awareness service (CAS) in early 1950s. His dream was realized in the form of *Contents in Advance* which was started in 1952 and continued for a few years. It was a compilation of the contents pages of all the library and documentation journals. Next came *Management Documation Review* in 1955. In 1956, its title changed to *Current Contents of Management and Social Sciences*. It also met the same fate as its predecessor. The CAS for which he became famous worldwide is *Current Contents of Chemical Pharmaco-Medical & Life Sciences* that started in 1958. This title changed to *Current Contents, Life Sciences* in 1967. In 1960, the *Current Contents of Space, Electronic & Physical Sciences including Pure & Applied Chemistry* covered a very wide area of science. Later on *Current Contents* embraced such areas as Agriculture, Food and Veterinary Sciences; Arts and Humanities: Behavioral, Social and Education Sciences; Clinical Practice; Education; Health Services Administration; Physical and Chemical Sciences, etc.

Of Eugene's path-breaking publications, *Science Citation Index (SCI)* is the one that impacted the scientific community most. It started in 1961. The success of the publication emboldened Eugene to launch *Social Sciences Citation Index* and *Arts and Humanities Citation Index* later. He brought out many other indexing periodicals such as *Index Chemicus; Index to Book Reviews; Index to Scientific and Technical Proceedings;* and *Index to Scientific Reviews.* 

A number of popular periodicals have been conceived and brought out by Eugene. They include *Current Controversy, Press Digest,* and *The Scientist.* Eugene contributed around 100 commentaries in *The Scientist.* 

A number of annuals have also been brought out by Eugene. Of these, the most important one is the *Journal Citation Reports* which appeared as a separate volume of *SCI 1975 Annual*. This publication provided the impact factors of all journals covered by SCI database. From this publication, scientists came to know about the ranking of periodicals in various subjects. This helped them to select the journals for publishing their papers. It also helped libraries in the journal selection and deletion. Bibliometricians found this tool as a boon for their various works. Some other publications are: *Atlas of Science, Current Bibliographic Directory of the Arts and Sciences, Who is Publishing in Science, etc.* 

ISI used to provide a number of services – all conceived by its creator, some of which are Automatic Subject Citation Alert (ASCA), ASCAmatio, ASCATOPICS, and Original Article Tear Sheets (OATS).

Awards and honors of Eugene are many. He obtained honorary doctorate degrees from a number of institutions. Hall of Fame Award from Information Industry Association, elected Fellow of the American Association for the Advancement of Science and so on.

The most luminous star of our profession went below the horizon on  $26^{th}$  February 2017 at the age of 91. Ms Meher Garfield related the end with the following words: "He was recently fitted with a pacemaker and because of that he was on a blood thinner. He fell and hit his head and this caused bleeding in the brain because of the blood thinner. He was not a religious man but he was deeply ethical. He did not want a funeral – just a simple cremation and we have honored his wish".

It is my great regret that Garfield could not read his biography that I had completed just two days before he passed away.

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