AccessionIndex: TCD-SCSS-V.20180312.001
Accession Date: 12-Mar-2018
Accession By: Dr.Brian Coghlan
Object name: Memorium to Prof.John Gabriel Byrne
Vintage: 2016
Synopsis: Trinity College Dublin, Memorium and published Obituaries.

Description:

Professor John Gabriel Byrne 1933-2016
MA, BAI, PhD, DIC, CEng. MIEI, FICS, MBCS, SFTCD

John Gabriel Byrne founded and led the Department of Computer Science, Trinity College Dublin, during its first 40 years of rapid development, and very substantially influenced the people who participated in the evolution of a national industry that experienced dramatic developments over that time.

John Gabriel Byrne was born in Dublin on 25-Jul-1933 to Doreen nee Lawlor and Thomas Brendan Byrne and they originally lived in Butterfield Park, Rathfarnham, Dublin. Throughout his life he maintained close ties with his extended family, and co-authored a book about his grandfather [1].

John Byrne attended Belvedere College, where his metier was classics, and so engineering was a late choice, perhaps with the influence of his father, who was an engineer. He felt his mathematics was not up to the standard required for the TCD engineering entrance exam so began study under Victor Graham, an inspiration to many, so beginning a long-term tutelage under Victor's guidance and a love and respect of mathematics. His subsequent career is outlined below.

Sadly, Professor John Byrne passed away on 16-Apr-2016.

The following obituary was published in the Irish Times, Saturday 23rd April, 2016. Our thanks to the Irish Times for permission to republish this obituary.

The father of computing in Ireland

Prof John Byrne

Born July 25th, 1933
Died April 16th, 2016

Prof John Byrne, who has died aged 82, was the father of computing in Ireland and responsible, directly or indirectly, for most of the extraordinary success of the Irish software sector.

In his five decades at Trinity College Dublin, during most of which he was head of its computer science department, he established many new courses and fostered leading-edge research, while lobbying and campaigning to make the nascent Irish software

industry a priority for the government and its agencies. Without his vision and determination, it is highly unlikely that Ireland would now have a software industry that employs more than 24,000 people and generates €16 billion in exports.

John Gabriel Byrne was born in Dublin in 1933, and educated in Belvedere College before entering Trinity College in 1951. Having graduated in engineering in 1956, he then studied in Birmingham and in Imperial College London. He started his PhD under Prof Bill Wright in Trinity College engineering school, finding mathematically complex solutions for torsional stresses in hollow reinforced concrete beams.

Social revolution
For two summers he worked with Bernard Carré on the English Electric DEUCE computer at Stafford, programming numerical solutions to these mathematical equations. It was at English Electric that he first saw the immense potential for computer technology to transform industry, commerce and education.

Having completed his PhD by 1961, he commenced as a junior lecturer in Trinity engineering school and determined to put Ireland in the forefront of this impending technological and social revolution.

In 1961 there were no more than a handful of computers in the country and very few people saw the need for any more. Within the engineering school, Byrne found a staunch strategic ally in the dean, Bill Wright, who persuaded TCD to buy an IBM 1620. This was a state-of-the-art machine that had 20,000 decimal digits of memory, a paper tape reader and punch, and an IBM electric typewriter. Immediately he set about providing forward-looking education and training for people who would work, or were already working, in the embryonic IT sector.

He ensured an engineering ethos permeated computer studies in Trinity, thereby sowing the seeds for the computerisation of Ireland's public and private sectors and the emergence of today's innovative software companies. A masters in computer applications was first offered in October 1963. It was taken by most of the leaders of commercial computing in Ireland at the time as well as by graduates in other disciplines who went on to make their names in commerce and research throughout Ireland and beyond. A computing option in the main engineering degree began in 1967 and a revolutionary evening BSc degree in 1973.

There followed a succession of innovative courses, short and long, at levels ranging from certificate to masters, and with many of them ground-breaking for Trinity and for Ireland.

Feminist
He recruited lecturers from many countries. As a lifelong feminist, he was especially keen to promote the engineering careers of young women in what was, and sadly still is, a very male-dominated profession.

When European research funding became available in the 1980s, Byrne facilitated young academics to obtain and to use effectively, substantial research grants. The scale and nature of the research - which was always in collaboration with major European corporations - made it challenging to fit within the traditional management

of Irish universities. Byrne used all his charm and diplomacy to advise, support and, where necessary, protect his many eager protégés.

From these projects sprang numerous software companies such as Iona, Baltimore, Cape Clear, Generics and right up to more recent success stories such as Havoc and Xcelerit. During this period, the IDA would bring every prospective inward investor to Trinity's computer science department where Byrne, with careful understatement, always made a lasting impression on the hi-tech visitors.

Neither was his influence confined to Trinity or even to Dublin. He gave generously of his time and that of his colleagues to assist the growth of computing education and research in the other universities and to the burgeoning Institutes of Technology. In all of these activities Byrne was an exemplary public servant. He did not seek to be financially incentivised in order to devote his life and considerable talents to the good of his country.

Personally, Byrne was a shy and exceptionally modest man who neither sought nor welcomed public recognition. Under the quiet exterior was a man passionate about many topics. He keenly followed, and shrewdly analysed, politics, horse-racing, and rugby. Over his entire life he gathered an impressive and invaluable collection of early computing books, documents, and instruments that now form the basis for the "John Gabriel Byrne Computer Science Collection" preserved in Trinity's department of computer science.

The John Gabriel Byrne Computer Science Collection: https://www.scss.tcd.ie/SCSSTreasuresCatalog/

This was followed on the letters page in The Irish Times, Wednesday 27th April, 2016.

Remembering John Byrne
Sir, – In your obituary for Prof John Byrne ("The father of computing in Ireland", April 22nd), you rightly referred to his generosity in giving of his time "to assist the growth of computing education and research in the other universities".

I recall that in the late 1980s, when University College Galway, now NUI Galway, was in the process of introducing computer science to the university, John Byrne was very supportive in developing our ideas. At the time, the university was in receipt of a very generous gift from Digital Equipment Corporation, to help establish a formal academic programme in computing. John Byrne gave freely of his time and advice as we created what ultimately grew into a very fine discipline of information technology in the university. – Yours, etc,
Dr JAMES J BROWNE,
President,
NUI Galway.

Many thanks to Michael, Edmund and Norman Williams, Mike Nowlan and Daphne Gill for the providing the photographs below.

The homepage for this catalog is at: https://www.scss.tcd.ie/SCSSTreasuresCatalog/
Click *'Accession Index'* (1st column listed) for related folder, or *'About'* for further
guidance. Some of the items below may be more properly part of other categories of
this catalog, but are listed here for convenience.

Accession Index	Object with Identification
TCD-SCSS-V.20180312.001	Memorium and Obituaries for Prof.J.G.Byrne, born: 25-Jul-1933, died: 16-Apr-2016, see: https://scss.tcd.ie/SCSSTreasuresCatalog/Prof-John-Gabriel-Byrne-1933-2016.pdf
TCD-SCSS-V.20180312.002	Portrait of Prof.John Gabriel Byrne, Trinity College Dublin, portrait by Atsushi Kaga, 2005
TCD-SCSS-V.20160929.001	Nine interviews of Prof.J.G.Byrne, TCD, O'Keefe, Maurice & Jane, 'Irish Life and Lore, Trinity College Dublin, John Byrne', CD no.55, 68:50 mins, MPEG 160kbps, c.2012.
TCD-SCSS-V.20180409.001	Prof.Jane Grimson, Memorial Discourse on Prof.J.G.Byrne presented on Trinity Monday, 2018.
TCD-SCSS-V.20171231.001	Ed: Chris Horn, Professor John Byrne: Reminiscences: Father of Computing in Ireland, 2017. ISBN-10: 1520696841, ISBN-13: 978 1520696843.
TCD-SCSS-V.20190831.001	Patricia Baker, Radio Documentary 'The Professor - Professor Byrne'. Audio Documentary by Patricia Baker on the life of Professor John Gabriel Byrne. Electronic audio file in MPEG-3 format on CD and online (Audio: 192kbps, 44kHz).
TCD-SCSS-V.20181005.003	Student video presentation about Professor John Gabriel Byrne, 2018, literature: Video made by one team in the 2018 Junior Freshman class asked to make videos on the history of computing.
TCD-SCSS-X.20180907.002	Prof.J.G.Byrne, Computerisation of the TCD Library 1872 Printed Catalogue.
TCD-SCSS-X.20121208.007	Richardson's Fantastic Forecast Factory. Painting of imaginary prediction factory, based on Ch.11 of Richardson's 'Weather Prediction by Numerical Process', ink and water colour, commissioned and owned by Prof.J.G.Byrne, painted by and Copyright of Stephen Conlin, 1986.
TCD-SCSS-X.20121208.004	History of the Department of Computer Science, Trinity College Dublin. The evolution of computer science as reflected in the long line of machines used by the department since its inception, c.1969.

References:

1. John Byrne and Michael Fewer, *Thomas Joseph Byrne - Nation Builder*, ISBN 9780-0-9575115-1-4, South Dublin Libraries, Unit 1, The Square Industrial Complex, Tallagh, Dublin D24, Tel: 01-4620073, see:
http://source.southdublinlibraries.ie/handle/10599/11153
Last browsed to on 26-Apr-2016.

2. The Library of Trinity College Dublin, *Passing of Professor John Byrne*, Memorium, 28-Apr-2016, see Fig.1 below and also:
http://www.tcd.ie/Library/news/2016/04/passing-of-professor-john-byrne/
Last browsed to on 30-Apr-2016.

3. Irish Computer Society, *Obituary: ICS Distinguished Fellow - Professor John Byrne*, 25-Apr-2016, see Fig.2 below and also:
https://www.ics.ie/news/obituary-ics-distinguished-fellow-professor-john-byrne
Last browsed to on 30-Apr-2016.

4. Trinity College Dublin, *Professor John Gabriel Byrne 1933-2016, MA, BAI, PhD, DIC, CEng. MIEI, FICS, MBCS, SFTCD*, see:
https://scss.tcd.ie/SCSSTreasuresCatalog/Prof-John-Gabriel-Byrne-1933-2016.pdf
Last browsed to on 12-Mar-2018.

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Passing of Professor John Byrne

Posted on **April 28, 2016** by **Greg Sheaf**

Professor John Byrne, who has been called "the father of Irish computing", passed away on April 16 at the age of 82. Prof. Byrne had a long and illustrious career in Trinity College Dublin, and was a great friend to the Library.

Thanks to his interest in the Library, our 1872 Printed Catalogue was digitised in 2005 as part of a final year project for Computer Science students initiated by Prof. Byrne. It is incredible to think that the same module is still in use today, a decade later, and has been of benefit to thousands of scholars – quite a legacy.

In the 1990s he was an adviser to the Stella Project, where records from the card catalogue and the periodicals catalogue were digitised and added to the online catalogue, and in the 2000s advised the Mellon Project tasked with digitising the Accessions Catalogue.

As mentioned, Prof. Byrne was a great friend to the Library and was very interested in our work – especially when it came to anything to do with computers! He was an exceptionally courteous user of the Library and very grateful for any help that the Library Staff gave him.

The Irish Times obituary gives more details of this great of Irish computing.

Trevor Peare, the Library's former Keeper of Readers' Services adds:

John Byrne told me that his interest in the Library was initially sparked by his discovery in the Library of a very rare edition of Galileo's works – most of the other copies had been publicly burned soon after publication. The record for the book was "buried" in the Printed Catalogue of 1872. At the time there were only three physical copies of the Printed Catalogue in the Library.

This led him on to his work to make the Printed Catalogue more readily available to scholars. He supervised a succession of Masters' students working on Optical Character Recognition (OCR) while it was a very new area of research and application. John found a full set of unbound sheets for the Catalogue in a basement on Front Square which he was able to use for his project.

John's computerised Printed Catalogue is a masterful demonstration of a powerful interface to a computer system – although the indexing and searching is all automated, the reader is still able to view an image of the appropriate entry in the original Printed Catalogue, so as to browse adjacent entries. It is well worth having a look at his "introduction" on the opening screen and his help screens are models too.

He was still working on some developments on the Catalogue right up to a month or so of his death – he most recently introduced a facility where an unsuccessful search in the Printed Catalogue was redirected to the Stella Search system. John was never one to let things sit as they were – always developing and improving on what had gone before.

John was well known in the Library during the 1970s and 1980s. As well as working on the Printed Catalogue project, he knew his way around the staff areas and was often seen inspecting the newly catalogued books on their way to the shelves – a genuine Renaissance Man, with a huge range of interests, but always kind and courteous to everyone – and meticulous about borrowing and returning his loans.

Figure 1: Passing of Professor John Byrne, Memorium by the Library of Trinity College Dublin
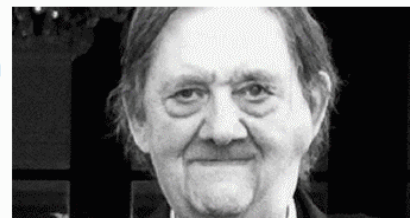
≣ **NEWS**

Obituary: ICS Distinguished Fellow - Professor John Byrne

The Irish Computer Society is deeply saddened to hear of the passing of Prof John Byrne, who has died aged 82. Our condolences are with his family.

Prof Byrne was one of only five ICS members to receive the title of Distinguished Fellow. He is described as *'the father of computing in Ireland and responsible, directly or indirectly, for most of the extraordinary success of the Irish software sector'* a sentiment that we here at ICS wholeheartedly agree.

Declan Brady – President of the Irish Computer Society said, "Professor Byrne was a founding member of the Irish Computer Society; it is an example of Professor Byrne's insight and vision that the Irish Computer Society is next year able to celebrate its 50th anniversary. We are saddened by his passing, but heartened by his extraordinary legacy and the inspiration that he has been to Irish IT Professionals."

Prof Mary Sharp, one of Prof Byrne's colleagues from TCD and also a Fellow of the Irish Computer Society remembered fondly that, "He always said that anyone could bring him a problem once they had worked out the solution as well."

Prof Sharp also recalled that, "When I sat with him on the interview panel for mature students he always asked the applicant if they had done any calculus and if they said yes he would ask one question and that was for the applicant to differentiate x squared. I thought it was far too simple. So as the interviews progressed and one after the other were asked to differentiate x squared and failed. He said that it is the easiest way of finding out if they really did do calculus or not, and hence what else on their application was true."

The Irish Times made an excellent obituary of Prof Byrne saying that *'Without his vision and determination it is highly unlikely Ireland would have a software industry that employs over 24,000 people'*. You can read the full obituary here: http://www.irishtimes.com/life-and-style/people/professor-john-byrne-the-father-of-computing-in-ireland-1.2620828 (http://www.irishtimes.com/life-and-style/people/professor-john-byrne-the-father-of-computing-in-ireland-1.2620828)

Prof Byrne is a great loss to not only ICS but Irish Society as a whole, we were lucky to have him.

Figure 2: Obituary: ICS Distinguished Fellow - Professor John Byrne, by Irish Computer Society

Figure 3: Byrne and Williams family, all rows left to right
Back Row: Ethna Byrne, Doreen Byrne, Niall Byrne, Brendan Byrne, Gerard Williams
Middle Row: May Byrne, Thomas Joseph Byrne, Isabel Williams, Arthur Williams
Front Row: Joan Byrne, Norman Williams, John Byrne (Prof.J.G.Byrne)

Figure 4: Gerald FitzGibbon, Victor Graham, John Byrne, Bill Wright, Doreen Byrne
and Brendan Byrne when John became a Fellow of TCD in June 1969

Figure 5: John Byrne at work in his office

Figure 6: Professor John Gabriel Byrne,"the image of John"

Obituaries

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In 1961 there were no more than a handful of computers in the country and very few people saw the need for any more. Within the engineering school, Byrne found a staunch strategic ally in the dean, Bill Wright, who persuaded TCD to buy an IBM 1620. This was a state-of-the-art machine that had 20,000 decimal digits of memory, a paper tape reader and punch, and an IBM electric typewriter. Immediately he set about providing forward-looking education and training for people who would work, or were already working, in the embryonic IT sector.

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■ Professor John Byrne ensured an engineering ethos permeated computer studies in Trinity College Dublin

Figure 7: Obituary of Professor John Gabriel Byrne, Irish Times, Saturday 23rd April, 2016