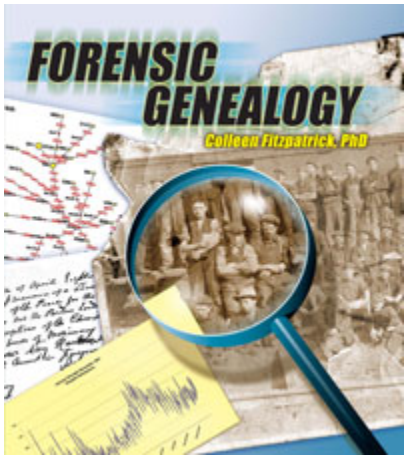
Irish Migration Studies in Latin America
Society for Irish Latin American Studies

Review of Colleen Fitzpatrick's
Forensic Genealogy

By Patricio MacDonagh



Fountain Valley, CA: Rice Book Press, 2005.
ISBN 0-9767160-03, 219 pp.
Illustrations, URL references, maps, tables, accompanying CD
(www.forensicgenealogy.info)

This book is an attempt to furnish the amateur genealogist with an array of tools used in forensic research, in order to enhance their capabilities of retrieving information in every type of material encountered. It has three main sections, referring respectively to the analysis of photographic material, generating databases of known and available data for research, and the use of DNA-related information in genealogical research.

The first section seeks to offer advice on how to obtain the most information possible from old photos, focusing in two principal methods of analysis:

One of the methods of analysis is the inspection of the material that contains the photo, and in that respect the book gives a brief outline of the early history of photography, starting with daguerreotypes, up to the middle of the twentieth century. Also included are valuable tips for dating, at least approximately, photographic material, with examples about how to obtain information from the details of the material that could easily be overlooked on a superficial examination.

The other method of analysis focuses on how to obtain the maximum information from the images themselves: Street names, brand names, styles of dress, traffic signals, car models or licence plates, even patches of snow in a photo, all this can contribute to finding out where your uncle lived during the roaring twenties.

This first section, referring to the analysis of photography for genealogical research, concludes with a case study in digital detective work, showing how to figure out the where, who, when and why from an apparently meaningless photo. It includes some material about how to deduce the year in which the photograph was taken, analysing how some objects project their shadows, and using certain concepts of cosmography and projective geometry in this process. This is accompanied by a prototype spreadsheet on the CD, so that readers may experience this process themselves.

This section, while containing much material of interest, is lacking in some aspects. When analysing a photo, it is assumed that the date of the copy is coterminous with the date that the photo was originally

shot. Another point is that there have been, and still are, many different types of photographic material and cameras, that only receive a brief mention. A similar comment relates to the analysis of the photographic paper used in the copies: it is centred on two brands of paper (Kodak and Agfa), without mention of other brands such as Ilford, Perutz and Ferrania. A very common material used, particularly between 1950 and the late 1980s, the diapositive, is similarly bypassed.

There is no mention of the possibility that one could be working with a falsified or altered photograph. Another point that might be commented upon is that mention is regularly made of technical aspects of digital photography such as contrast, gamma correction, and high resolution. The neophyte reader would benefit from brief explanations of such terms. Particularly conspicuous is the absence of face identification and recognition from the book.

The second section refers specifically to the use of databases, from different sources (city directories, seaman's protection certificates, fire victims, police reports, coroners' records, hospital records, BMD records etc.,) and how to combine them in what may be described as a genealogical process of 'data mining.'

Two distinct methods of research are also outlined in this section. The first is what Fitzpatrick describes as 'cultural profiling,' that is, establishing general or particular patterns of behaviour in a community from data in a given database, as a method of identifying different guidelines for analysis.

The second method of research is the recording in a database of data from various different sources. In the book, these are grouped into two different types: the periodical database, that is, a database that is compiled for specific periods (census, city directories, etc.), and events databases that contain records that are updated continuously, for example, BMD registers.

On the basis of numerous examples, Fitzpatrick demonstrates how to create your own databases from the given material, and how to process them (sorting by different criteria, rearranging the data, etc.). She also offers advice on creating a database of databases, that is, a database in which you may register which databases you have researched for each surname of interest.

The reader would benefit from a clear definition of what a database is, and the fact that databases are mainly used for transactions and 'data mining' processes. Fitzpatrick's information on commercial genealogy software is accurate, yet she neglects to mention that when data sources are mainly on paper or microfilm, extracting information can be a painstaking task. Furthermore, a spreadsheet does not strictly qualify as a database, due to its many restrictions in terms of size.

The third section, on the use of DNA analysis for genealogical research, is certainly the most innovative of the approaches covered by the book. It begins with a brief introduction to the fundamental notions of the constitution of a DNA molecule, the fundamental building block of life in all its expressions, and how is it present in the chromosomes and in the mitochondria.

A description of the principal terms used in DNA analysis is also provided, and an explanation of the differences between the forensic, medical and genealogical uses – and the extension – of DNA analysis.

Fitzpatrick subsequently provides commentary on Sykes' book *The Seven Daughters of Eve* and the conclusions which he arrives at on the basis of research on the Mitochondrial DNA (MtDNA) of the modern European population, and the detection of groups (haplogroups or clades, in technical genetic jargon) that share the same mutations of MtDNA.

In the pages that follow, there is a more technical description of the two principal avenues of research in DNA genealogical analysis: The paternal line, which is based on the markers found in the male Y chromosome, and the female line, based on the clades that are identified by the markers in MtDNA.

This technical section contains important information about the different companies that perform DNA analysis, the testing options that they provide, their costs and websites. There is also a list of the online databases that contain vast collections of genealogical DNA information, and to which you may submit your DNA results, hoping for a match.

The final topic covered by the book is how to cope with the search for the Most Recent Common Ancestor for any group of persons related either by the paternal line (using the Y chromosome markers) or the maternal line (using the MtDNA markers). This topic relies heavily on probability and statistical concepts,

such as confidence intervals, binomial and Poisson distributions and Bayesian hypotheses. If one is in possession of the DNA analyses of several persons who are presumably related, and follows the guidelines given in the book, including prototype spreadsheets for doing the necessary computations, it is possible to construct a cladogram, or a tree representation of the probable relationships between the different persons involved in the study. There will certainly be some surprises, such as illegitimate offspring and their descendant branch on the cladogram.

This avenue of research opens up a totally new and unexplored frontier, and the book suggests many ways of exploring it. However, it should be considered that DNA analysis is not cheap, with an approximate cost of U$100–300 per individual. Another consideration is the reluctance that some relatives might have in submitting material for the tests, a point that Fitzpatrick does address. The other relevant caution on DNA research for genealogical purposes is that is strictly based on probability theory, in contrast to the methods used, for example, in paternity tests or forensic research.

The book is certainly innovative, and provides a wealth of guidelines for performing genealogical research. While certain topics would merit further research, the book provides comprehensive guidelines for amateur genealogists, and it may be hoped that such research would be included in a second edition of the book.

Patricio MacDonagh

Translated by Claire Healy

Author's Reply

Forensic Genealogy is a practical guide that offers major innovations in genealogical research methods that anyone can apply. Although I am flattered that the reviewer treated it as an academic publication - it is not!

For example, my experience here in the US with identifying hundreds of old family photographs is that over 99% have been either on Agfa or Kodak print paper. As an optical scientist, I have used many different types of photographic films, plates, and print paper, but in writing *Forensic Genealogy* I included only those materials that the reader might encounter in analysing family pictures. I have not seen Ilford, Perutz or Ferrania used for family photographs.

The reviewer comments, 'Furthermore, a spreadsheet does not strictly qualify as a database, due to its many restrictions in terms of size.' *Forensic Genealogy* was intended for an audience more interested in new innovations in how to research their families than in precise technical definitions.

In the section about DNA, I was conservative on how technical to make it. The chapter is set up so that readers can read as far as they feel comfortable, without sacrificing information that may be important to them, although I could have loaded the book with a highly mathematical discussion. Our second book *DNA & Genealogy* covers this subject in much more detail, yet is still very readable.

In the eighteen months since the book was published, thousands of copies have been sold, yet I have not seen a single used copy on the market. The readers must like it.

Colleen Fitzpatrick