



Linguistics, Languages & Cultures
(Graduate field for CAP, CASS & RSPAS)
Seminar Series

Murder Fraud and Forensic Speech Science

Dr Phil Rose

Friday 4th Sept

3.30pm to 5.30pm (followed by drinks)

Baldessin Precinct Building, room 4.44 (level 4)

Abstract

Over about the last twenty years much attention has been given to the proper evaluation of forensic evidence, resulting in what has been heralded as a major paradigm shift in many areas of forensic identification science, including forensic voice comparison. The paradigm shift was ultimately due to the post-1968 "new evidence scholarship" debate, and the increased incidence of statistical evidence associated with forensic DNA profiling. The National Research Council of the USA recently reported to Congress on serious deficiencies in forensic science, specifically in the lack of research demonstrating the reliability of forensic methods; and in the way evidence is presented by analysts in the courtroom. The UK too has recently recognised the need for greater accountability in forensic science. Spurred on in part by some recent spectacular miscarriages of justice due to faulty statistical reasoning and junk science, the Law Commission of England and Wales recently issued a consultation paper on how to determine evidentiary reliability and admissibility of expert evidence.

In Australia, and in particular at the ANU, we paradigm-shifted long ago, and have been very much in the forefront of evidence evaluation, at least as far as forensic voice comparison is concerned. In this talk, I will explain what this paradigm shift entails, and how it applies to two areas of Forensic Speech Science: Forensic Voice Comparison, and Disputed Utterances. In particular I will explain how one properly (i.e. legally and logically) estimates the strength of evidence in support of a typical prosecution claim like "the incriminating speech came from the suspect". I will illustrate the application of the ideas from two recent high profile cases: a \$150 million telephone fraud in NSW, and the "confession" in the David Bain trial (New Zealand's most celebrated murder case). Because knowing your error rate is one desideratum for admissibility, I'll also give examples of research into testing how well we can identify someone by their voice under forensically realistic conditions.

Dr Phil Rose is Reader in Phonetics and Chinese linguistics at the ANU in the School of Language Studies, and has been British Academy Visiting Professor at the Joseph Bell Centre for Forensic Statistics and Legal Reasoning at the University of Edinburgh. He is author of *Forensic Speaker Identification*, in the Taylor & Francis *Forensic Science Series*, and *The Technical Comparison of Forensic Voice Samples* in the legal reference series *Expert Evidence*. He has also published widely on forensic speaker identification. He is chairman of the Forensic Speech Science Committee of the Australasian Speech Science and Technology Association, and former Member of Council of the International Phonetic Association. He has done research for almost 30 years on similarities and differences between individuals in their speech, and has been undertaking forensic speaker identification case-work in Chinese and Australian English for well over a decade.