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## **General principles of linguistics**

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inguistics is the scientific study of language and is one of the sciences recognized by the American Academy of Sciences. Linguists regularly apply for and are granted research funds by the National Science Foundation. In virtually any major university or college, a student can major in linguistics and many major universities grant a PhD degree in linguistics. There are academic associations and peer-reviewed professional journals within the field of linguistics. Similarly, sociolinguistics is an established branch of linguistics with peer-reviewed professional journals. Linguistics is a well-known science, and there are scores if not hundreds of professional peer-reviewed journals. However, there is confusion over the term "linguist". The English language has two main meanings of the word "linguist": one, a speaker adept at a foreign language, and two, a scientist who studies human language as a set of natural phenomena. Academic, scientific linguists belong to the second group (although many are also adept at foreign languages; for example, one of my major research interests is the semantic system of Swahili, a Bantu language which I also teach at the university level). Forensic Linguistics applies the science of linguistic investigation to issues of law. Forensic Linguistics augments legal analysis by applying rigorous, scientifically accepted principles of analysis to legal evidence like contracts, letters, confessions, and recorded speech. Linguists- as all scientists- seek to explain the nonrandom distribution of data. Just as bullets do not randomly issue from firearms nor chemical concentrations randomly spread throughout a human body, words are not found to randomly issue from the keyboards and mouths of speakers of English or any other language. Words adhere to patterns; these patterns are the subjects of systematic observation of scientific linguists. As in all other sciences, linguistics solves problems by constructing competing hypotheses and then testing which hypothesis better explains the non-random distribution of the data. For example, Galileo noticed that while the hypothesis that the Sun revolves around the Earth explained much of the data (it certainly looks like it does) - the competing hypothesis, that the Earth revolves around the Sun, explained more of the non-random distribution of the data (for example, the observed, nonrandom orbits of the planets) and was therefore the superior hypothesis. Linguistics may stand alone in the forensic sciences in that after lay users of language are presented with the linguist's analysis, they often indicate that the linguist's analysis is selfevidently true; however, before the analysis is presented, lay users of language often cannot apprehend what the analysis will show. A useful analogy is to medical experts. They describe and define what X-rays show; so linguistic experts describe and define the underlying structure of written and spoken language. Both sets of experts can do this because they are trained and skilled in what to look for as they assess the meanings and implications discovered in their observations.

## **Biography**

Robert A Leonard, PhD is Professor of Linguistics, founding Director of the Graduate Program in Forensic Linguistics, and founding Director of the Institute for Forensic Linguistics, Threat Assessment and Strategic Analysis at Hofstra University in the NYC area.

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