John C Stillwell* (stillwell@usfca.edu), Mathematics Department, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080. The Long Flirtation between Logic and Combinatorics.

In the mid-17th century, Leibniz dreamed of a calculus ratiocinator that would settle all disputes in logic by combinatorial computation. But little happened until the development of set theory and symbolic logic in the 19th century, and the startling discovery of Gödel incompleteness in 1930.

This led to the search for natural theorems not provable by finitary methods – a search that turned up some remarkable theorems of combinatorics in the 1970s and 1980s. Today, with the assistance of some eminent mathematicians, logic and combinatorics seem to be on the brink of living happily ever after. (Received May 05, 2008)