I will discuss several representations of hitting-time distributions for (finite-state, ergodic, time-reversible, continuous-time) Markov chains and stochastic constructions corresponding to these representations. Examples of representations of distributions considered, each of which has a link to published work of Mark Brown, are those of

(i) the hitting time from state 0 of any given state for a birth-and-death chain on the nonnegative integers, as a convolution of exponential distributions;

(ii) the hitting time from stationarity of any given state, as a mixture of $N$-fold convolution powers of a certain distribution, with $N$ geometrically distributed; and

(iii) the hitting time from stationarity of any given set of states, as a convolution of certain modified-exponential distributions that relate to the interlacing eigenvalue theorem for bordered symmetric matrices.

Intertwinings of Markov semigroups (I’ll explain what these are) play a key role in the stochastic constructions. (Received September 22, 2009)