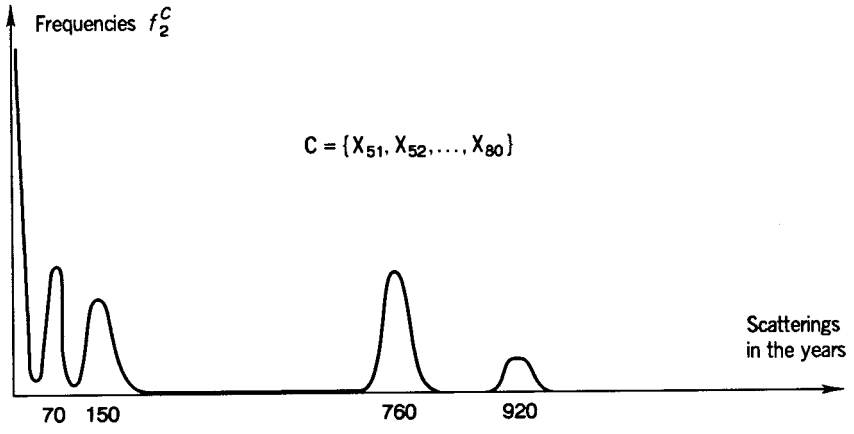

Figure 77. Special frequency histogram for the list of nationalities of Roman popes

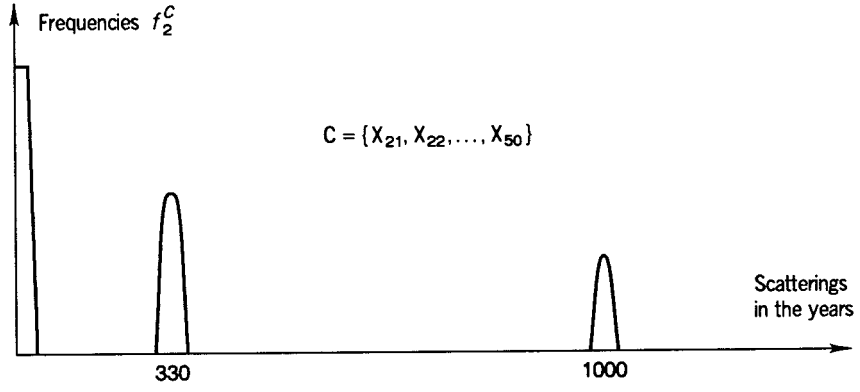

Figure 78. Special frequency histogram for the list of nationalities of Roman popes

as the random variables ξ_1, ξ_2, ξ_3 and their frequency histograms f_1, f_2, f_3, will be defined similarly. However, there exists in a historical source a natural dependence of the name set in X_i on that in $X_{i\pm l}$ (for small l). We call this dependence a *damping succession*.

The existence of a damping succession in a narrative source leads to the necessity of making Statement (A) precise, and altering (B). In fact, if two names u_i and u_j are in some chapter X_m, then even a local relation leads to a statistically strong relation, with u_i and u_j being repeatedly encountered in X_m and neighbouring chapters, which implies splashes near the origin on the frequency histograms f_2 and f_3. Therefore, for a narrative source, Statement (B) is replaced by the following.

(C) If the chronology of a source with damping succession is correct, and histogram $f_1(j) = P(\xi_1 = j)$ is linearly decreasing, then f_2 and f_3 should monotonically