typical of the given duplicate system, than that of an arbitrary pair of names from I. Therefore, the histograms f_2 and f_3 will contain (in contrast with f_1) splashes near to the origin and the values of the shifts $S_1, S_2, \ldots, S_m$.

Consider the problem of the verification of (B). We shall see that the distribution of ξ_1 has the same form in all the cases. Consequently, the problem is given rise as to how to verify the hypothesis that the distribution of ξ_2 (ξ_3) is close to a certain given one. It is natural to make the problem more precise as follows.

Consider the histogram f_2 (or f_3) as the empirical distribution on the set $\{0, 1, 2, \ldots, n-1\}$, constructed from a finite sample from the parent population, and verify the hypothesis H_0 that the general distribution coincides with the given one on the set $\{0, 1, \ldots, n-1\}$. By the universe, we understand a probability space constructed from a certain unknown extension of the list in question. We take the number of chapters as invariable, and the chapter volume as increasing rapidly. Thus, we can include into the extended list the names of the relatives, courtiers, etc.; in the case of a narrative source, we enter all personages active in the country at that time. Hence, the parent population is constructed from all sorts of data both in preserved and lost sources. What was constructed from a known list can then be regarded as a finite sample from a very large, practically "infinite" population. This statement is rather general in the considered problems (see [18], where a similar situation arises). We assume that the available sample contains information just about the general distribution of the random variables considered in the above sense. In other words, any feasible way of selecting personages from a sufficiently long composite chronicle does not affect the distribution of the related name scatterings. In fact, this choice is always of "local" character, whereas the scattering distribution is a global characteristic, and stable under local perturbations.

4. *Computation of histograms for real historical texts.* It is easy to calculate that, in the case of a uniformly dense list $X = (a_1, a_2, \ldots, a_N)$ such that all the chapters X_i, $i = 1, 2, \ldots, n$, contain the same number p of entries, the histogram $f_1(j) = P(\xi_1 = j)$ linearly decreases on the set $j \in \{1, 2, \ldots, n-1\}$, $f_1(0) = 1/n$ and $f_1(j) = 0$ for $j < 0$ and $j \geqslant n$.

In fact, ξ_1 takes the value j in $2(n-j)p^2$ cases out of N^2 possible ($|\Omega| = N^2$), since there exist $n-j$ ways of fixing the chapter with the minor number; the chapter with the major number is fixed uniquely in accordance with the first one and number j, whereas the set of their name pairs with scattering j is of power p^2. The chapter with the minor number may appear at the first or at the second step of the sampling, that is why the coefficient 2 appears in the formulae. If $j = 0$, then both chapters coincide and so the coefficient 2 is absent. Thus,

$$f_1(j) = P(\xi_1 = j) = \frac{2(n-j)}{2N^2}p^2 = \frac{2(n-j)}{n^2}, \qquad 0 \leqslant j \leqslant n-1; \qquad f_1(0) = \frac{1}{n}.$$

In the sequel, we will always suppose that the list under consideration is dense sufficiently uniformly, i.e., the histogram $f_1(j)$ is linear with respect to j on the set $\{1, \ldots, n-1\}$. For example, computations show that this condition is mostly fulfilled to a very high accuracy for the lists of popes' names. In some cases, especially when we work with the name lists, extracted from historical texts, it is necessary to norm the inhomogeneous list in order to satisfy the mentioned condition.