nonzero element of the row numbered $B_0$, placed in the column $T_0$, and equal to the number of occurrences of the name $B_0$ in $X(T_0)$. The names are numbered as they appear in $X$; therefore the matrix $P\{T\}$ is step-like triangular, as in Fig. 6, and no longer square. For the Old and New Testaments for example, $P\{T\}$ possesses 218 columns and 1977 rows, or names.

The matrix $P\{T\}$ can also be successfully employed for discovering the chronologically correct order of chapter-generations in $X$. By the frequency damping principle, most of the rows in $P\{T\}$ should start with an absolute maximum. In other words, for the correct order of chapters, there is only one possibility for a person first appearing in a row, namely, to be gradually forgotten in moving to the right (since frequency of occurrence is damped). The knowledge of the matrix $P\{T\}$ makes it easy to restore $K\{T\}$, for which we have to sum up the groups of rows beginning with nonzero elements in one column $T_0$, and obtain one row $K(T_0, T)$ of $K\{T\}$. Generally speaking, it is impossible to restore $P\{T\}$ from $K\{T\}$, because the former contains more information than the latter. Hence, in all the described experiments, the rectangular matrix $P\{T\}$ was first computed, and then $K\{T\}$.

A permutation of the columns in $P\{T\}$ does not alter its elements, which makes $P\{T\}$ different from $K\{T\}$, the elements of the latter changing on a column permutation. Moreover, the arising transformation of $K\{T\}$ cannot be computed if the complete matrix $P\{T\}$ is unknown. The explicit formulas expressing the entries of $K\{T\}$ in terms of those of $P\{T\}$ are linear and easily derived. We omit them here.

The concept of statistical duplicates can be extended. Call two texts, e.g. chronicle fragments, *dependent* (*statistical duplicates*) if they describe approximately the same sequence of events in the history of one region in the same time interval. Texts, possibly written by different chroniclers, but having one common prototype (original) also turn out to be dependent. We call texts *independent* if they describe 'substantially different' sequences of events, either occurring in different regions or at different periods of time. We assume two periods of time to be different if their intersection on the time axis is no more than half their length. The other textual pairs will be called *neutral.* The frequency duplicating principle permits us to discover statistically dependent duplicates in large collections of texts.

We now give one of the corollaries to the frequency damping principle. In addition to the square and rectangular name frequency matrices, we can also construct other and 'rougher' ones, which also prove useful. Let an ordered sequence of texts or textual chapters $X(1), X(2), \dots, X(n)$ be given. Fixing a pair of texts $X(i)$ and $X(j)$, we can determine the number $q(i, j)$ of common names mentioned both in $X(i)$ and $X(j)$. We can either count them without multiplicities or sum up their multiplicities in $X(i)$ and $X(j)$. When $i = j$, we can assume that either $q(i, i)$ equals the complete number of names in $X(i)$ or vanishes. We assumed $q(i, i) = 0$ in our experiments. It is clear that all $q(i, j)$ are computed by means of the rectangular matrix $P\{T\}$. It follows from the frequency damping principle that if two texts $X(i)$ and $X(j)$ are placed near to each other, then they have sufficiently many common names, describe events close in time, and involve approximately the same set of persons. On the contrary, if $X(i)$ and $X(j)$ are distant, then they have few common names; the farther apart the texts are, the fewer common names. Organizing $q(i, j)$ into the square matrix $Q\{T\}$, we obtain a symmetrical matrix which can also be used for searching for dependent texts or duplicates.

The above method can also be employed in investigating the collection of *reciprocal references* in a number of texts $X(1), \dots, X(n)$. Denoting by $s(i, j)$ the number of citations in $X(i)$ of $X(j)$, we obtain a square matrix $S = \{s(i, j)\}$ of order $n \times n$. In contrast with $Q$, it is not, generally speaking, symmetrical, in which case the frequency