pope St. Peter and his seven successors, until Hyginus in 137–141 A.D., is regarded today as extremely uncertain according to J. Blair [74] or, e.g., S. G. Lozinsky:

"Actually, reliable information about Roman bishops is available only starting with the 3rd c. A.D., but also with gaps ..." ([119], p. 312).

Our method of dynastic parallels led to the discovery that the period of the Roman episcopate, from 140–314 A.D., overlaps 314–532 A.D. with the proximity coefficient 8.66×10^{-8}. Recall that such a small value indicates the dependence of the two dynastic streams. Forty-three parallels of the total number of 47 were discovered in 141–532 A.D. (see the first and second periods above), and only four popes ruling for a short time were not taken into account [74]. Both streams are exceptionally representative. This patching together of church chronicles is fully consistent with the above independent gluing of the emperors' lists, i.e., with overlapping of the Second and Third Roman Empires. It is a consequence of the rigid shift by *c.* 333 years.

The dating method based on the frequency-damping principle was applied to the popes' list in the interval from the 1st c. to the 17th c. A.D., then broken into 10-year intervals. A complete list was made of all popes beginning their rule in the 1st–17th cc. A.D., and all 89 names were entered in the order of their appearance. The frequency matrix was constructed by A. Makarov (see below). Note that certain popes were called by substantially different names in the different tables. A rectangular matrix of order 89×170 was constructed. The values placed in each row represent the evolution of the frequencies of the mentioning of the names. There are altogether 89 rows (as well as names) and 170 columns (as well as decades). More precisely, for each name from the above list, those decades were marked in which at least one pope with the given name ruled for at least one year. For example, row 53 indicates all the decades in which pope John ruled for at least one year, viz.,

523–526, 532–535, 560–573, 640–642, 635–636, 704–707, 872–882, 898–900, 914–928, 931–936, 956–963, 965–972, 983–984, 985–996, 997–998, 1003, 1003–1009, 1024–1033, 1258–1287, 1316–1334, 1410–1415 (Fig. 68).

The square matrix of order 170×170 was then constructed (Fig. 68). $K(t_0, t_0)$, the numbers of popes ruling in a decade t_0, and whose names were not encountered before, were placed in the row t_0. $K(t_0, t)$ indicates how many times the names first appearing in a decade t_0 were mentioned in the popes' list in the decade t. Thus, the principle for matrix construction coincides with the general rule discussed above for the matrix $K\{t\}$. The obtained matrix was investigated on a computer by G. Nosovsky at my request and by the above algorithm, thus leading to the discovery of duplicates in the popes' list. In particular, a whole group of popes ruling in the 1st A.D. (e.g., Clement) according to traditional version, was unexpectedly born again in the 11th c. A.D. (!), which precisely corresponds to the shift by 1,000–1,050 years, i.e., the second basic shift on the GCD. The general picture of this effect can be seen in the matrix $K\{t\}$ (Fig. 68). All of the names first appearing in 50–260 A.D. then almost completely vanish for several hundred years, and the whole strip consisting of the first twenty rows is composed of zeroes only up to the year 1050, when they unexpectedly come back to life again; this powerful splash embraces 1050–1190 A.D., after which the frequency of use descreases again, though not identically to zero (see Fig. 68). The same result is obtained also by constructing