

To sum up, the tidal area in Chiangnan changed according to the shifts in the major rivers after the sixth century. It changed during the eighth, thirteenth, sixteenth and seventeenth centuries. The proportion of the high field zone in the tidal area of Chiangnan became very large as a result. It is also shown that the tide's going up a river varies throughout the year, but is strongest in autumn.

### Methods of Chronological Calculation in Tibetan Historical Sources

by Zuihō YAMAGUCHI

There are two points in the chronological calculations found in Tibetan historical works which have not as yet been clarified. One is the start of the Tibetan year, and the other concerns the difference between two types of chronological calculation, the usage of which is found to be inconsistent in Tibetan historical works themselves.

Unlike Chinese historical sources, in Tibetan works of a historical nature it is usual in giving a date to specify only the name of the year. Therefore, for the sake of convenience, present-day scholars indicate the dates of events according to western reckoning; but so far the relationship between the two systems has remained unclear. Chinese historical sources give the start of the Tibetan year as the fourth month of the lunar calendar (麥熟=麥秋), whilst the Tibetan "Annals" and other works from Tun-huang indicate that the start of the year in Tibet corresponded to the third month of the three months making up spring. Since Tibetan chronological works attest that the four seasons in Tibet were one month behind China, one can conclude without any fear of contradictory evidence in the available sources that the start of the Tibetan year was the fourth month of the Chinese lunar calendar.

Thus the reason why the dates in Tibetan historical works are often one year earlier than those given in Chinese sources becomes clear, and one is able to ascertain that there is no need to deliberately alter the Tibetan dates to conform with those indicated in Chinese sources.

In the case of chronological calculations, one finds the expressions "...years after" the initial year of reckoning, and "the ...-th year". Accordingly a

difference of one year results, and cardinal and ordinal numbers are used respectively. In addition, it is possible to distinguish the two expressions, in the case of only cardinal numbers being used, by the verbal expression employed—*song* and *'das* in the former case, and *lon* and *'gro* in the latter.

Recently it has been claimed by a European scholar, G. Uray, that there was no way of expressing ordinal numbers in ancient Tibet before the appearance of the suffix *pa*, and furthermore that all expressions meaning "...years after" should be interpreted as meaning "the ...-th year". Since this view has resulted in considerable confusion, these two types of chronological calculation have been illustrated in the present paper by examples taken from historical works dating from prior to the sixteenth century.

In addition, the characteristics of calculations based on "calendar years" have been outlined, and, on the basis of a passage from the east inscription of the Lhasa pillar used as an example of an ordinal expression, we explain that it was 640 by the Tibetan calendar when the Chinese princess Wên-ch'êng came to Tibet, and that this falls within the fourteenth year of the Chêng Kuan 貞觀 era, thus corroborating our long-standing claim concerning the year of her entry into Tibet.