

第三号

(国沢義典 Mean Concentration Function
と Typical Function VI P.46 ~ 54.7 間落丁一頁挿入)

従つて

$$\begin{aligned}
 & \eta_{ni} M + \sum_{m=1}^{m_{ni}} \left\{ 1 - F_{nim}(\eta_{ni} A_{ni}) \right\} \\
 & \geq \sum_{m=1}^{m_{ni}} \left\{ \int_0^{\eta_{ni} A_{ni}} \frac{x}{A_{ni}} dF_{nim}(x) + (1 - F_{nim}(\eta_{ni} A_{ni})) \right\} \\
 & \geq \sum_{m=1}^{m_{ni}} \left\{ \int_0^{\eta_{ni} A_{ni}} \frac{x}{A_{ni}} dF_{nim}(x) + \int_{\eta_{ni} A_{ni}}^{\infty} \frac{x}{\eta_{ni} A_{ni}} dF_{nim}(x) \right\} \\
 & = \sum_{m=1}^{m_{ni}} \int_0^{\infty} \frac{x}{A_{ni}} dF_{nim}(x) \rightarrow 0, \quad (i \rightarrow \infty).
 \end{aligned}$$

これは (4.2.11) と矛盾する、かくして $\eta_{ni} A_n = C_n$ において (4.2.10) を得る、逆く (4.2.12) より (4.2.3) と (4.2.13) が出るから

$$A_n = \sum_{m=1}^{m_n} \int_0^{C_n} x dF_{nm}(x)$$

とすれば

$$\frac{A_n}{C_n} = \sum_{m=1}^{m_n} \int_0^{C_n} \frac{x}{C_n} dF_{nm}(x) \xrightarrow{n \rightarrow \infty} 0$$

且つ

$$\begin{aligned}
 \sum_{m=1}^{m_n} \frac{1}{A_n} \int_0^{A_n} x dF_{nm}(x) &= \sum_{m=1}^{m_n} \left\{ \frac{1}{A_n} \int_0^{C_n} x dF_{nm}(x) + \frac{1}{A_n} \int_{C_n}^{A_n} x dF_{nm}(x) \right\} \\
 &= I + o(1), \quad (n \rightarrow \infty)
 \end{aligned}$$

が成立し、更く

$$\begin{aligned}
 \sum_{m=1}^{m_n} \left\{ 1 - \frac{1}{A_n} \int_0^{A_n} x dF_{nm}(x) \right\} &\leq \sum_{m=1}^{m_n} \left\{ \int_0^{A_n} \frac{x^2}{A_n^2} dF_{nm}(x) + (1 - F_{nm}(A_n)) \right\} \\
 &= \frac{1}{A_n^2} \sum_{m=1}^{m_n} \left\{ - \int_{|x| > A_n} dF_{nm}(x) + 2 \int_0^{A_n} x dx \int_x^{\infty} dF(v) + (1 - F_{nm}(A_n)) \right\}
 \end{aligned}$$