Structural Eng./Earthquake Eng. Vol. 3, No. 2, 485s, October 1986 / Discussion-Closure
Japan Society of Civil Engineers (Proc. of JSCE No. 374 / I -6)

A NON-ITERATIVE OPTIMUM DESIGN METHOD FOR CABLE-STAYED BRIDGES

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Structural Eng./Earthquake Eng. Vol. 3, No. 1, 103s~111s, October 1986
 (Proc. of JSCE No. 368 / I -5)

Discussion ————— *By Masaaki HOSHINO (Shin-Nippon Giken Co., Ltd)*

The authors have presented an interesting approach toward optimum design method for cable-stayed bridges. The writer sees that the method is based on Eq. (17), which is derived from Eq. (16). The writer would like to point out that three terms in the parentheses of Eq. (17), $a_i \cdot \frac{N_i^2}{\sigma_{Nai}}$, $b_i \cdot \frac{M_i^2}{\sigma_{Nai}}$ and d_i , have different dimensions from each other, provided that coefficients, a_i , b_i and d_i , in Eq. (17) are identical with those in Eq. (16). Therefore, the correctness of Eq. (17) seems to be questionable.

(Received May 15 1986)

Closure ————— *By Kunio TORII, Kiyohiro IKEDA and Tomihiko NAGASAKI*

The authors sincerely appreciated the valuable academic comment offered by Mr. Masaaki Hoshino. We felt rewarded to know that our paper has drawn some interest but fully embarrassed to find a mistake in the paper.

The closure for this comment is as follows. As he mentioned, the variables a_i , b_i , and d_i have different dimensions in Eqs. (16) and (17). They apparently are incorrect in this regard. In order to resolve this problem, the three variables in Eq. (17) should be replaced by a_i^* , b_i^* , and d_i^* , respectively. These two equations nonetheless have only conceptual meanings in the context so that this modification would not affect the remaining parts of paper.

(Received September 18 1986)